City of Rockville
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Development Review Comments

October 25, 2023
STP2024-00465
Submission Review Comments
12501 Ardennes Ave.

The following are Development Review comments from City of Rockville staff related to the project submission.

Reviewing Staff

Planning & Development Services (PDS)

Project Manager:
Kimia Zolfagharian (KZ), Principal Planner
kzolfagharian@rockvillemd.gov

Comprehensive Planning:
Katie Gerbes (KG), Comprehensive Planning Manager
kgerbes@rockvillemd.gov

Forestry Reviewer:
Shaun Ryan (SR), Development Review Supervisor
sryan@rockvillemd.gov

Fire Reviewer:
Charles Biggus (CB), Fire Plans Examiner
cbiggus@rockvillemd.gov

Building Reviewer:
Chris Dempwolf (CD), Buildings Plan Examiner Supervisor
cdempwolf@rockvillemd.gov

Dept. of Public Works (DPW)

Engineering Reviewer:
Dave Waterman (DW), Senior Civil Engineer
dwaterman@rockvillemd.gov

Traffic and Transportation Reviewers:
Andrew Luetkemeier (AWL), Principal Transportation Engineer
aluetkemier@rockvillemd.gov

Faramarz Mokhtari (FM), Senior Transportation Planner
fmokhtari@rockvillemd.gov

Housing and Community Development (HCD)

Housing Reviewer:
Punam Thukral (PT), Housing Specialist
pthukral@rockvillemd.gov

Recreation and Parks (RPD)

Parks Reviewer:
Christine Henry (CH), Deputy Director
chenry@rockvillemd.gov

PDS Comments

Development & Zoning (KZ)

1. Request: Uniwest Development, LLC ("Uniwest") (the "Applicant"), the owner of the property located at 12501 Ardennes Avenue (the "Property"), is pursuing a Level 2 Site Plan approval to convert the existing office structure on the Property to multi-family residential use containing a total of 181 units (206,486 square feet) that will include 15 percent moderately priced dwelling units ("MPDUs") (the "Project").
2. Located at the intersection of Twinbrook Parkway and Ardennes Ave.
    a. Zoning District: MXE (Mixed-Use Employment)
    b. Land Use: O (Office)
    c. Conversion of the existing office building to multi-dwelling residential use is proposed.
    d. Per Zoning Ordinance Sec. 25.13.03 "multiple-unit dwelling" is a permitted use in the MXE zone. See Comprehensive Planning comments below for compliance with the land use designation and Comprehensive Plan.
3. Proposed Height: 118 feet (Max. 120'). 10 Story building (addition of 3 over existing). Per Sec. 25.05.07.d of the Zoning Ordinance, modifications to an approved development, including an increase in height, are a major amendment to the existing approval. USE2002-00642 Condition of Approval #1.a limited the building height to 85'. The submitted plans indicate a proposed height of 118'. Please provide information in the project narrative submitted with the Site Plan submittal that addresses the proposed height increase and how surrounding conditions have changed since the original approval to support the additional requested height.
4. Rooftop amenity spaces: what is the height, and is it less than 25% of the floor area? With the addition of the rooftop mechanical equipment, a waiver to the 25% rooftop coverage maximum may be required.
5. Discuss open space programming and propose potential connections within the forest conservation easement.
6. Provide MPDU specific units, mix, and locations. The Project Data Table on Sheet SP-1 Notes "Determine at Site Plan" for the residential uses. Since the application is for a Level II Site Plan, this information needs to be provided at this stage. While the proposed number of units is 28 du, additional information is needed as to where these units will be located, and on which floors.

7. Please verify that the width of the parking spaces provided in the garage adhere to the minimum required. Some parking spaces appear to be less than the required width. With the reduction in parking spaces proposed, please verify that requirements are still being met.
8. Please verify if site plan survey is current.
9. Provide additional information on loading spaces and the proposed zones.
10. Provide additional information on the programming of the Public Use Spaces within the open area, as highlighted on Sheet SP-5.
11. Provide additional renderings of the proposed building and the site landscaping, particularly the building entrance on the north side of the building, and the pedestrian level experiences along Ardennes Ave and Twinbrook Parkway.
12. Previous approvals and applications:
    a. ANX2000-00131: an annexation agreement identifying restrictions on the height, floor area ratio (FAR), and lot coverage for new development in the O-1 Zone. The City Attorney's Office has reviewed the Annexation Agreement and determined that, given the revisions to the base zone from O-1 to MXE since the project approval, and related increases to maximum height and removal of FAR requirements, the Annexation Agreement is no longer valid or applicable. The proposed development is subject to the base zone standards as modified by the initial development approval.
    b. USE2002-00642: approval of a 150,000 square foot office building on the site subject to conditions of approval
    c. PLT2007-00471: final record plat to create Lot 5, Block E (the subject site)
    d. PAM2023-00146
13. The proposed renderings depict white/cream-colored bands on the facades that face the Ardennes Ave and Twinbrook Parkway intersection. This breaks up the visual autonomy of the proposed darker masonry/brick proposed in other parts of the façade. Is this intended to reflect the existing materials on the façade of the office building? Warmer colors that match the proposed darker brown colors may provide additional cohesiveness with the neighboring properties.

See plan markups for additional comments.

Comprehensive Planning (KG)

1. This application is compliant with the City's Comprehensive Plan. The application is located within Planning Area 9. Several elements of the project application are in alignment with goals, policies, and actions outlined in Planning Area 9 chapter of the Comprehensive Plan. These compatibilities are:
    - The Plan identifies the future land use of the parcel to be "office." That said, the base zoning of MXE does allow for residential uses, and staff believe the shift of land use to residential is consistent with the surrounding fabric, as this parcel is the only parcel within Planning Area 9 designated as an office use; all other land is envisioned as mixed-use or residential.
    - A key issue identified is the "concern over the changing environment of retail and office markets that could impact existing businesses and jobs," (page 350). The applicant is proposing a switch in land use to address this concern.
    - There are no recommendations within the Plan specific to the 12501 Ardennes property on its own.
2. The application is consistent with the Housing element of the Comprehensive Plan. The Housing element of the Plan calls to "identify potential opportunities for conversion of obsolete offices and hotels into residences," (page 200) and to "allow new housing in locations where amenities and infrastructure already exist, and that are compatible with the existing neighborhood," (page 200). The proposed project is consistent with both housing policy goals. Furthermore, the conversion of this property will result in 28 new Moderately Priced Dwelling Units (MDPU) for the city – expansion of the MDPU program is a major goal of the Plan.
3. The application is also consistent with the Land Use element of the Comprehensive Plan. The Land Use element is supportive of the conversion of buildings, as Policy 6 is to "anticipate and plan for land use change from commercial to residential uses" (page 26). Additionally, the Land Use element seeks to "continue to develop new walkable and bikeable, mixed-use activity centers on available land, primarily commercial sites deemed ready for conversion" (page 35). The proposed project is consistent with these land use goals.

Forestry (SR)

1. See comments on Landscape Plan, Forest Conservation Plan, and NRI/FSD pages in submittal.

Fire (CB)

1. See site plan markups.

Building (CD)

DPW Comments

Engineering (DW)

1. Please see site plan markups.

Traffic and Transportation (AWL/FM)

1. Please see site plan markups.
2. The applicant will need to resubmit a revised transportation report that addresses the staff's comments.

HCD Comments

Housing (PT)

1. The applicant is providing 15% of the total units as MPDU, 28 MPDU units.
2. Residential units constructed on this site must comply with the standards and requirements of the Rockville Moderately Priced Dwelling Unit Chapter 13.5 of the Rockville City Code.

3. Staff want the applicant to identify the location of MPDU units, which must be distributed throughout the building in all sections and levels of the building, so as not to concentrate all MPDUs in one section(s) of the building.

4. The MPDUs should be indistinguishable from the market rate units.

5. The MPDUs must be income tiered at three income bands—50%, 60% and 80% of AMI.
6. The applicant must provide the list of all the MPDU units and the site plan.

7. The staff would like to propose that the applicant must designate a few ADA(the Americans with Disability Act)/UFAS(Uniform Federal Accessibility Standards) units within the MPDU.

8. Before applying of any building permits, an MPDU Rental Offering Agreement must be executed and MPDU Declaration of Covenants and Restrictions must be recorded in a form approved by the Mayor and Council and the Office of the City Attorney.

RPD Comments

Parks (CH)

1. The Publicly Accessible Art in Private Development ordinance will apply to this project. Application will be required prior to building permit.
2. As it pertains to the ordinance, this development is both an expansion and a renovation which should be included in the Art in Private Development expenditure calculation in the completed application. The existing square footage is not exempt from the legislation since Sec 4-44(b7) applies to renovations of an existing commercial building. The renovation involves the following, therefore the existing square footage is subject to the art contribution:

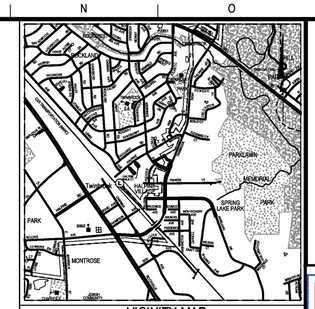
   Sec 4-44(b7b) Renovation disturbing fifty (50) percent or more of the gross floor area of the building or structure: the required expenditure shall be calculated based on the gross floor area of the entire building or structure at the rate applicable to construction of the same type.

Note: At the time of the next submittal, the applicant will need to provide a point- by-point response letter noting how the staff review comments have been addressed. Comments provided in letter format can be addressed letter format. Comments provided in the plans should be addressed via plan markups rather than letter format. See attached example.

TWINBROOK PLACE

SITE PLAN

STP2023-00XXX



VICINITY MAP
SCALE: 1"=2000'

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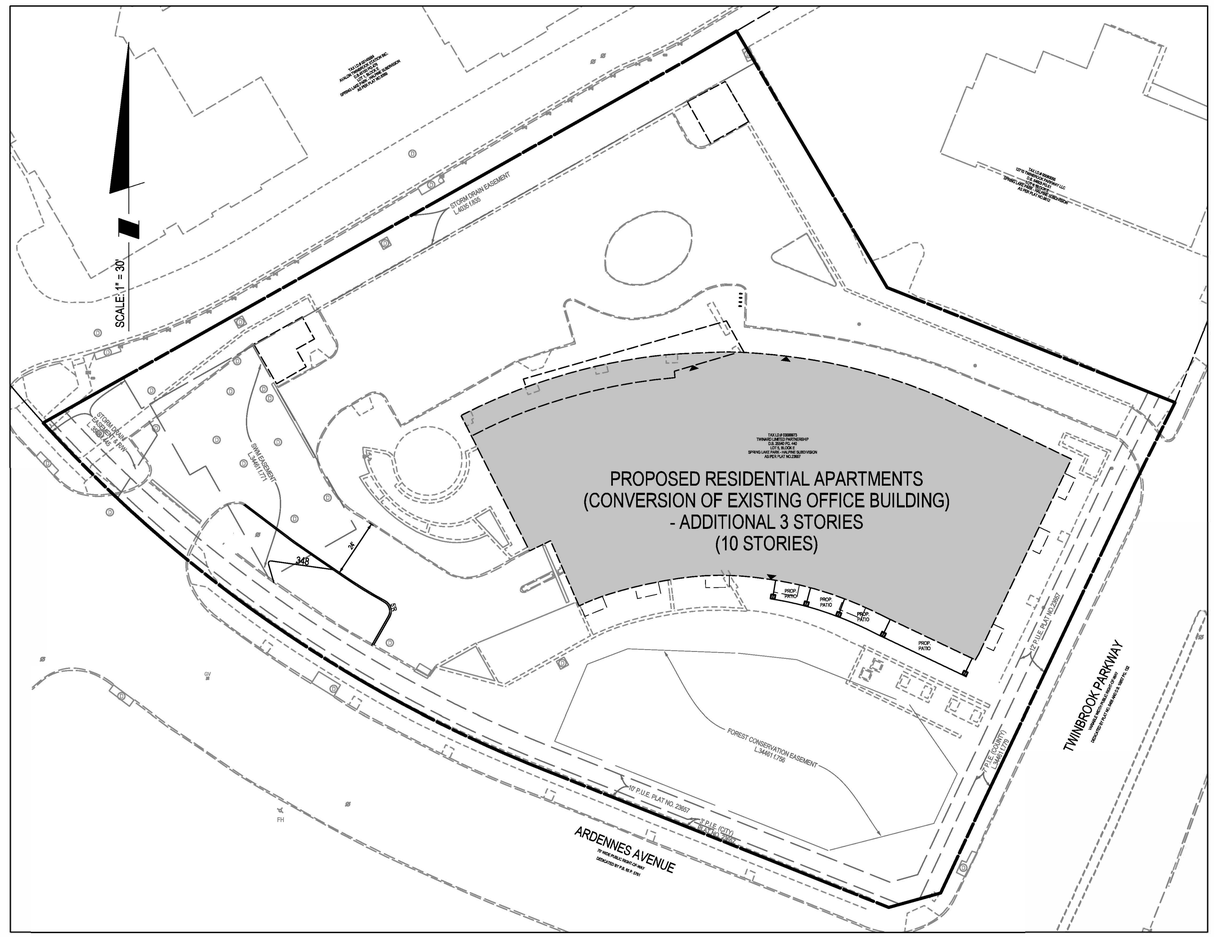

GENERAL NOTES:

1. THE PROPERTY IS IDENTIFIED AS LOT 5, BLOCK E, SPRING LAKE PARK HALPINE SUBDIVISION, AS RECORDED ON PLAT 23857.
2. THE TAX ID NUMBER IS 03599973 IN DISTRICT 4, ON TAX MAP GQ OF MONTGOMERY COUNTY, MARYLAND.
3. THE TRACT AREA IS 91,223 SF, OR 2.09419 AC.
4. THE PROPERTY IS ZONED MXE (MIXED-USE EMPLOYMENT).
5. THE PROPERTY LIES WITHIN THE TWINBROOK NEIGHBORHOOD PLAN OF THE CITY OF ROCKVILLE, APPROVED AND ADOPTED APRIL 27, 2009.
6. THERE ARE NO STREAM OR FLOODPLAIN PRESENT TO WITHIN 100 FEET OF THE SITE.
7. THE SITE IS WITHIN THE MIDDLE ROCK CREEK WATERSHED, USE CLASS I.
8. THERE IS NO FLOODPLAIN ON THIS PROPERTY. SOURCE OF THE INFORMATION IS FROM FEMA FLOODPLAIN COMMUNITY - PANEL NUMBER 24031C0353D.
9. THERE ARE NO WETLANDS PRESENT ON THE SITE.
10. THE SOIL TYPE THROUGHOUT THE SITE IS 400 (URBAN LAND).
11. BOUNDARY AND TOPOGRAPHY BY FIELD SURVEY PERFORMED BY SOLTESZ, INC. IN JULY 2023.
12. NO WETLAND WERE IDENTIFIED ON THE SITE PER FIELD INVESTIGATION BY WETLAND STUDIES AND SOLUTIONS, INC. IN MAY 2023.
13. THERE IS NO RECORD OF RARE, THREATENED OR ENDANGERED SPECIES ON THE SITE AS VERIFIED BY LETTER FROM THE MARYLAND DEPARTMENT OF NATURAL RESOURCES, DATED JUNE 28, 2023.
14. THE PROPERTY IS NOT IN THE LOCATIONAL ATLAS AND INDEX OF HISTORIC SITES AND NO HISTORIC FEATURES EXIST ON OR ADJACENT TO THE SITE.
15. THE SITE IS NOT WITHIN THE CITY OF ROCKVILLE HISTORIC DISTRICT AND IS NOT A BUILDING OR STRUCTURE WITHIN THE CITY OF ROCKVILLE'S HISTORIC BUILDING CATALOG, PER CITY OF ROCKVILLE MAPS ARCGIS.
16. EXISTING WATER AND SEWER CATEGORIES ARE W-1 AND S-1 RESPECTIVELY.
17. PEPCO, WASHINGTON SUBURBAN SANITARY COMMISSION (WSSC) AND WASHINGTON GAS, VERIZON, AND COMCAST UTILITY SERVICES ARE AVAILABLE TO THE SITE.

Twinbrook Place - Project Data Table: MXE Zone (Mixed-Use Employment)

	Required Development Standards	Proposed
Site Area:		
Gross Tract Area		**2.09419 ac (91,223 sf)**
Net Site Area		2.09419 ac (91,223 sf)
MXE Zone Development Standards (Sec.25.13.05.b.1)		
Maximum Building Height	120'	118'±
Min. Lot Width at Front Lot Line	10' min.	413.23'
Open Area and Public Use Space		
Open Area	20% (0.41 ac., 18,245 sf.)	28.57% (0.60 ac., 26,068± sf.)
Public Use Space Required within Open Area	5% (0.10 ac., 4,562 ± sf.)	9.72% (0.20 ac., 8,868± sf.)
Building Setbacks: (Minimum)		
Public right-of-way abutting:	None or 10' min. if provided.	15'
Side setback:		
Residential land abutting:	Greater of 25' or 1/2 height of bldg.	N/A
Non-residential land abutting:	None or 10' min. if provided.	15'
Rear setback:		
Residential land abutting:	Greater of 25' or 1/2 height of bldg.	N/A
Non-residential land abutting:	None or 10' min. if provided.	15'
Non-Residential Uses:		
(NONE)	(Determine at Site Plan)	0
Residential Uses:		
Multi-family	(Determine at Site Plan)	181 du
MPDU's		
MPDU's	N/A	15% (28 du)
Residential Parking (Sec. 25.16.03.d)		
Auto Spaces		
Multiple-unit (0-1 BR) 40% (106 du)	1 sp/du = 106 spaces	43 Surface Parking Spaces 41 Standard spaces 2 Van accessible spaces
Multiple-unit (2 or more BR) 60% (75 du)	1.5 sp/du = 113 spaces	368 Garage Parking Spaces 360 Standard spaces 2 Van-accessible spaces 6 Accessible spaces
Total:	219 spaces	411 spaces
Bicycle Spaces		
Short Term	4 sp (1 sp. per 50 du)	4 sp.
Long Term	61 sp (1 sp. per 3 du)	61 sp.
Total:	65 sp.	65 sp.

OWNER / APPLICANT:

TWINARD LIMITED PARTNERSHIP
C/O UNIWEST DEVELOPMENT LLC
8191 STRAWBERRY LANE, SUITE 3
FALLS CHURCH, VA 22042
PHONE: 301-948-2750
ATTN: MICHAEL D. COLLIER

ENGINEER / LANDSCAPE ARCHITECT:

SOLTESZ, INC
2 RESEARCH PLACE, SUITE 100
ROCKVILLE, MD 20850
PHONE: 301-948-2750
ATTN: TIMOTHY A. HOFFMAN

ARCHITECT:

LESSARD DESIGN, INC.
8521 LEESBURG PIKE, SUITE 700
VIENNA, VA 22182
PHONE: 571-830-1865-539-8776
ATTN: LETICIA FLORES

ATTORNEY:

LERCH, EARLY, & BREWER, CHTD
7600 WISCONSIN AVENUE, SUITE 700
BETHESDA, MD 20814
PHONE: 301-841-3832
ATTN: PATRICIA HARRIS

CITY APPROVALS ASSOCIATED WITH THIS PLAN

	TRACKING NO.	APPROVAL DATE
STORMWATER MANAGEMENT	SMCXXXX-XXXXX	
SEDIMENT CONTROL	SCPXXXX-XXXXX	
WATER AND SEWER	WSAXXXX-XXXXX	
MDE NOTICE OF INTENT		
NRI / FSD		
LANDSCAPE		
FOREST CONSERVATION		

Community Planning & Development Services
Received
September 6, 2023

SHEET INDEX

NO.	REVISIONS	BY	DATE

MISS UTILITY NOTE

INFORMATION CONCERNING EXISTING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES AND UTILITY CROSSINGS BY DIGGING TEST PITS BY HAND, WELL IN ADVANCE OF THE START OF EXCAVATION. CONTACT "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE ENGINEER AND THE UTILITY COMPANY BEFORE PROCEEDING WITH CONSTRUCTION. CLEARANCES LESS THAN NOTED MAY REQUIRE REVISIONS TO THIS PLAN.

OWNER / DEVELOPER / APPLICANT

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C/O UNIWEST DEVELOPMENT LLC
8191 STRAWBERRY LANE, SUITE 3
FALLS CHURCH, VA 22042-1032
(703) 698-4042

MICHAEL D. COLLIER

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 49428 , **EXPIRATION DATE:** 05/31/2025

COVER SHEET

SITE PLAN
TWINBROOK PLACE
12501 ARDENNES AVE
LOT 5, BLOCK E
CITY OF ROCKVILLE (4TH) ELECTION DISTRICT, MONTGOMERY COUNTY, MARYLAND

TAX MAP: GQ63	ZONING CATEGORY: MXE
WSSC 200' SHEET: 216NW06	SITE DATUM HORIZONTAL: _____ VERTICAL: _____
1" = AS NOTED	DATE: 8/31/2023 DESIGNED: NC TECHNICIAN: JP CHECKED: TAH CAD STD'S. VERSION: CONNECT / NCS
SHEET: SP-1	
PROJECT NO.: 1047-01-00	

REFERENCE GRID: A B C D E F G H I J K L M N O

SCALE: 1" = 20'

LEGEND

PROPERTY BOUNDARY	
EXISTING CURB	
EXISTING BUILDING	
EXISTING CONTOURS	448 / 450
EXISTING STORM DRAIN	66 RCP SD
EXISTING SEWER	SAN
EXISTING WATER	6" W / W
EXISTING NATURAL GAS	NG
EXISTING ELECTRIC	E
EXISTING TREE	
EXISTING SPOT SHOT	× 448.35
EXISTING LIGHT FIXTURE	

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EXISTING CONDITION PLAN

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WSSC 200' SHEET: 216NW06	SITE DATUM: HORIZONTAL: ____ VERTICAL: ____
1" = 20'	DATE: 8/31/2023
SHEET: SP-2	DESIGNED: NC; TECHNICIAN: JP; CHECKED: TAH; CAD STD'S. VERSION: CONNECT / NCS
PROJECT NO.: 1047-01-00	

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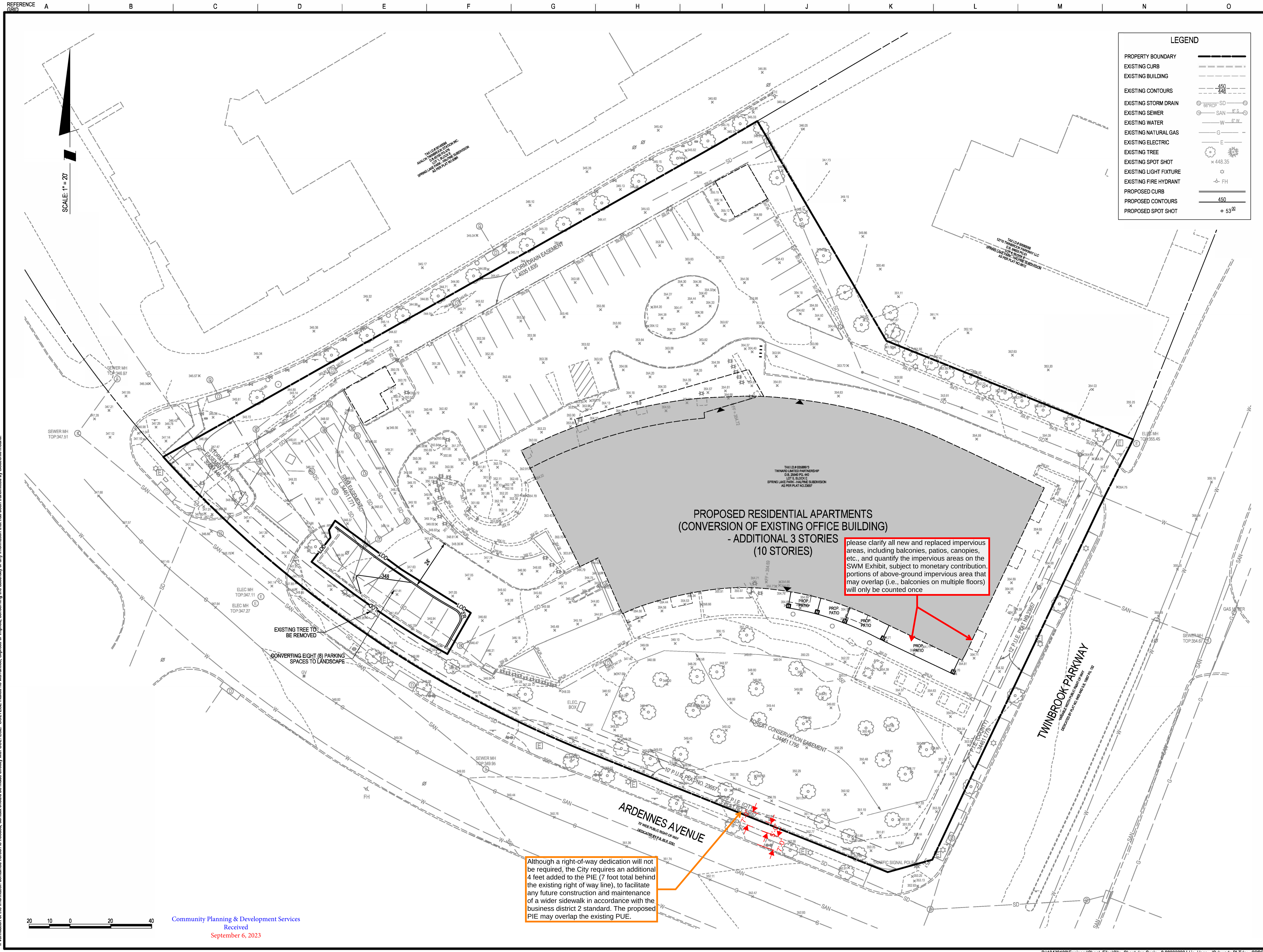

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TWINBROOK PLACE
12501 ARDENNES AVE
LOT 5, BLOCK E

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WSSC 200' SHEET	SITE DATUM
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SHEET	SP-3
PROJECT NO.	1047-01-00

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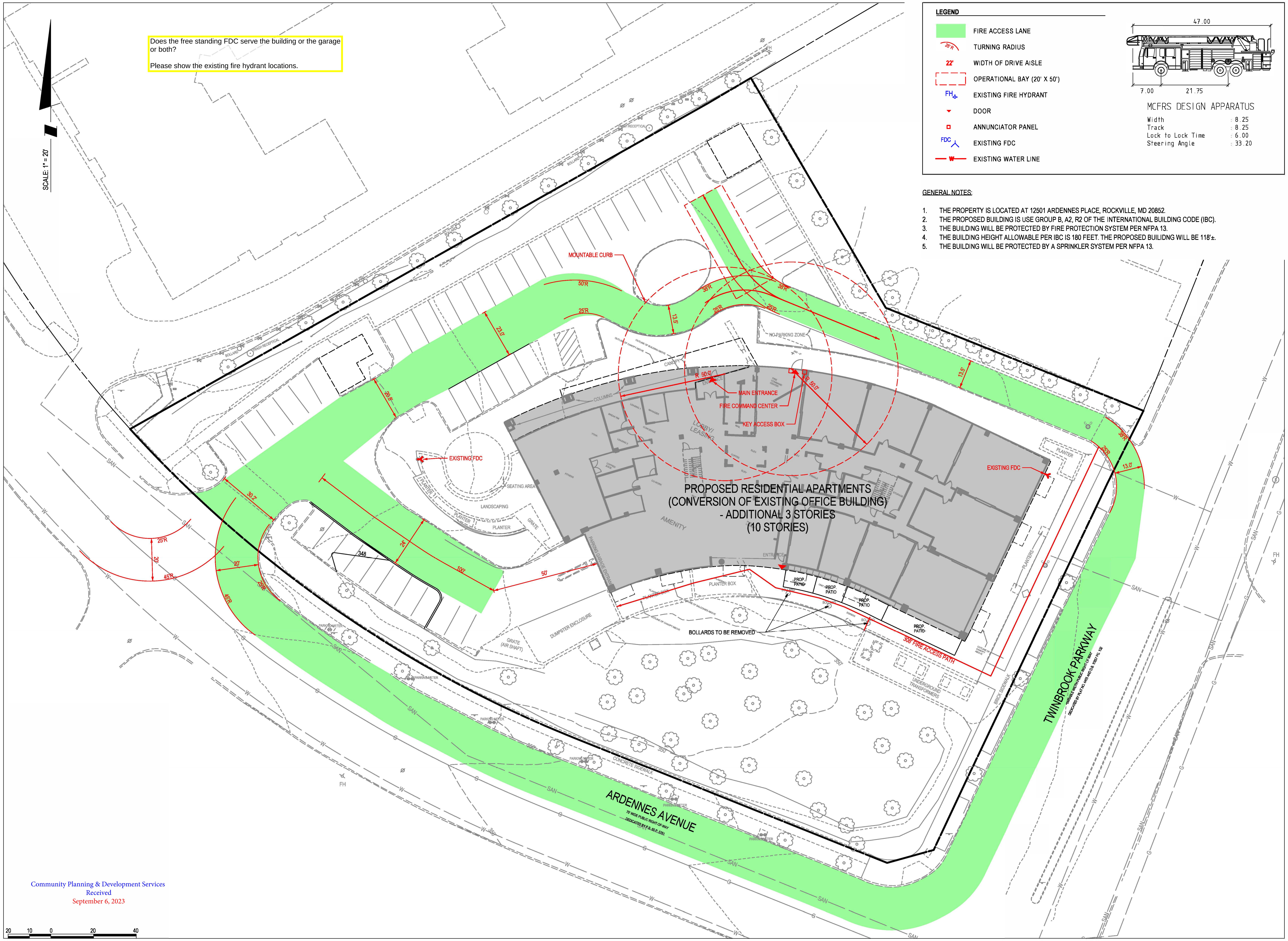
Does the free standing FDC serve the building or the garage or both?

Please show the existing fire hydrant locations.



LEGEND

- FIRE ACCESS LANE
- 25'R TURNING RADIUS
- 22' WIDTH OF DRIVE AISLE
- OPERATIONAL BAY (20' X 50')
- FH EXISTING FIRE HYDRANT
- DOOR
- ANNUNCIATOR PANEL
- FDC EXISTING FDC
- W EXISTING WATER LINE

MCFRS DESIGN APPARATUS

47.00 / 7.00 / 21.75

Width	: 8.25
Track	: 8.25
Lock to Lock Time	: 6.00
Steering Angle	: 33.20

GENERAL NOTES:

1. THE PROPERTY IS LOCATED AT 12501 ARDENNES PLACE, ROCKVILLE, MD 20852.
2. THE PROPOSED BUILDING IS USE GROUP B, A2, R2 OF THE INTERNATIONAL BUILDING CODE (IBC).
3. THE BUILDING WILL BE PROTECTED BY FIRE PROTECTION SYSTEM PER NFPA 13.
4. THE BUILDING HEIGHT ALLOWABLE PER IBC IS 180 FEET. THE PROPOSED BUILIDNG WILL BE 118'±.
5. THE BUILDING WILL BE PROTECTED BY A SPRINKLER SYSTEM PER NFPA 13.

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STATE OF MARYLAND
TIMOTHY A. HOFFMAN
NO. 49428
REGISTERED
PROFESSIONAL ENGINEER

FIRE PROTECTION SITE PLAN

SITE PLAN
TWINBROOK PLACE
12501 ARDENNES AVE
LOT 5, BLOCK E

CITY OF ROCKVILLE (4TH) ELECTION DISTRICT, MONTGOMERY COUNTY, MARYLAND

TAX MAP: GQ63	ZONING CATEGORY: MXE
WSSC 200' SHEET: 216NW06	SITE DATUM HORIZONTAL: ____ VERTICAL: ____
ONE INCH 1" = 20'	DATE: 8/31/2023; DESIGNED: NC; TECHNICIAN: JP; CHECKED: TAH; CAD STD'S. VERSION: CONNECT / NCS
SHEET SP-4 OF ____	
PROJECT NO. 1047-01-00	

Community Planning & Development Services
Received
September 6, 2023

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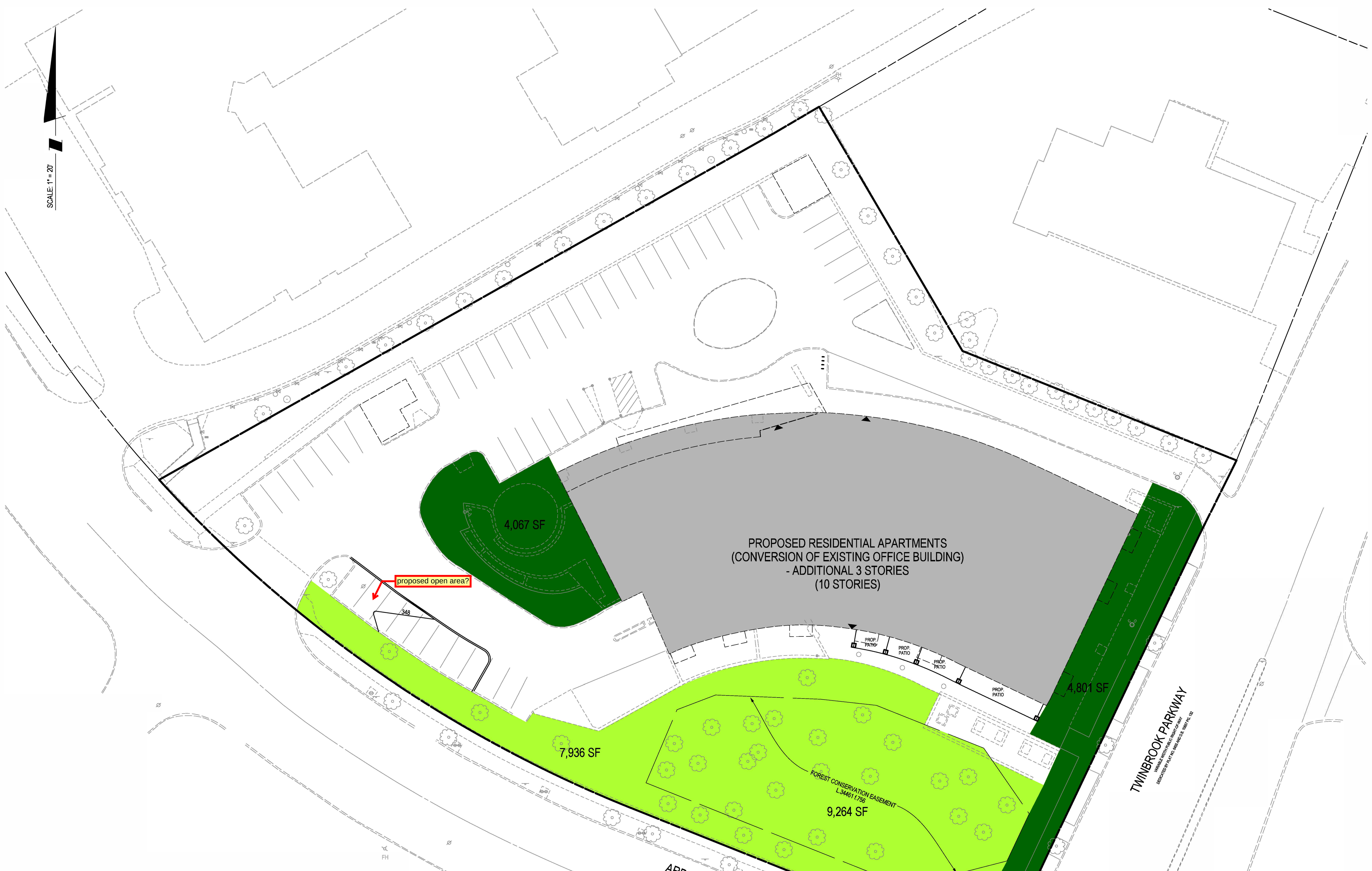

OPEN AREA AND PUBLIC USE TABLE

NET TRACT AREA:	91,223 SF
OPEN AREA 26,068 SF / 0.60 AC	
OPEN AREA REQUIRED: 18,245 SF (20.00%) **OPEN AREA PROVIDED: 26,068 SF (28.57%)**	
PUBLIC USE SPACE WITHIN OPEN AREA 8,868 SF / 0.20 AC	
PUBLIC USE SPACE REQUIRED: 4,562 SF (5.00%) **PUBLIC USE SPACE PROVIDED: 8,868 SF (9.72%)**	

20 10 0 20 40

Community Planning & Development Services
Received
September 6, 2023

SOLTESZ, INC.
ROCKVILLE OFFICE
2 Research Place, Suite 100
Rockville, MD 20850
P. 301.948.2750 F. 301.948.9067
www.solteszco.com

Engineering
Surveying
Planning
Environmental Sciences

NO.	REVISIONS	BY	DATE

MISS UTILITY NOTE

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OWNER / DEVELOPER / APPLICANT

TWINARD LIMITED PARTNERSHIP
C/O UNIWEST DEVELOPMENT LLC
8191 STRAWBERRY LANE, SUITE 3
FALLS CHURCH, VA 22042-1032
(703) 698-4042

MICHAEL D. COLLIER

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND,
LICENSE NO. 49428 , **EXPIRATION DATE:** 05/31/2024

PUBLIC USE SPACE AND OPEN AREA

SITE PLAN
TWINBROOK PLACE
12501 ARDENNES AVE
LOT 5, BLOCK E

CITY OF ROCKVILLE (4TH) ELECTION DISTRICT, MONTGOMERY COUNTY, MARYLAND

TAX MAP: GQ63	ZONING CATEGORY: MXE
WSSC 200' SHEET: 216NW06	SITE DATUM HORIZONTAL: ______ VERTICAL: ______
ONE INCH 1" = 20'	DATE: 8/31/2023
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	TECHNICIAN: JP
SHEET **SP-5**	CHECKED: TAH
	CAD STD'S. VERSION: CONNECT/ NCS
PROJECT NO. 1047-01-00	

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REFERENCE GRID A B C D E F G H I J K L M N O

A minimum of 5% of the internal area of a parking surface must be landscaped shade tree. Please refer to Section 4 d.2.c of the Landscape Screening & Lighting Manual.

Please include shrubs per Landscape Screening & Lighting Manual Requirements.

Parking buffers will be required to meet Landscape Screening & Lighting Manual requirements. Please pursue a hold harmless agreement with stormwater easement holder.

17,669.06 sf

PROPOSED BIKE RACKS

PROPOSED RESIDENTIAL APARTMENTS
(CONVERSION OF EXISTING OFFICE BUILDING)
- ADDITIONAL 3 STORIES
(10 STORIES)

Please show proposed and existing trees. Staff would like to ensure that forest conservation easement will not be over-planted.

Are cloud-shaped circles indicating existing or proposed trees? Please clarify symbols.

Community Planning & Development Services
Received
September 6, 2023

SCALE: 1" = 20'

20 10 0 20 40

Twinbrook Place Plant Schedule

Qty	Key	Botanical Name	Common Name	Size	Spacing	Type	Remarks
Shade Tree							
11	ARU	Acer rubrum 'October Glory'	October Glory Red Maple	2.5 - 3" Cal.	As Shown	B&B	Well-Formed Crown, Matching
1	NSY	Nyssa sylvatica	Blackgum	2.5 - 3" Cal.	As Shown	B&B	Well-Formed Crown, Matching
1	ULM	Ulmus americana	American Elm	2.5 - 3" Cal.	As Shown	B&B	Well-Formed Crown, Matching
7	LTU	Liriodendron tulipifera	Tulip Popular	2.5 - 3" Cal.	As Shown	B&B	Well-Formed Crown, Matching
5	QRF	Quercus robur 'Fastigiata'	Pyramidal English Oak	2.5 - 3" Cal.	As Shown	B&B	Well-Formed Crown, Matching, Pronounced Columnar Habit
9	QRU	Quercus rubra	Northern Red Oak	2.5 - 3" Cal.	As Shown	B&B	Well-Formed Crown, Matching
1	QAL	Quercus alba	White Oak	2.5 - 3" Cal.	As Shown	B&B	Well-Formed Crown, Matching
Evergreen Tree							
8	CLE	Cupressparis leylandii	Leland Cypress	7 - 8' Ht.	As Shown	B&B	Dense & Well Branched to Ground
6	THO	Thuja occidentalis 'Emerald'	Emerald Arborvitae	7 - 8' Ht.	As Shown	B&B	
1	PST	Pinus strobus	Eastern White Pine	7 - 8' Ht.	As Shown	B&B	
8	ICF	Ilex crenata 'Fosteri'	Fosteri Holly	7 - 8' Ht.	As Shown	B&B	
Ornamental Tree							
3	CCA	Cercis canadensis	Eastern Redbud	7 - 8' Ht.	As Shown	B&B	Well-Formed Crown, Matching
5	LIN	Lagerstroemia indica 'Natchez'	Natchez Crape Myrtle	3 - 4' Ht.	As Shown	B&B	Well - Formed, Matching, Multi-stem
5	PRA	Prunus avium	Sweet Cherry	7 - 8' Ht.	As Shown	B&B	Well-Formed Crown, Matching
3	PIO	Prunus x incam 'Okame'	Okame Cherry	10 - 12 Ht.	As Shown	B&B	Well-Formed Crown, Matching, Planter Specimen
Deciduous Shrub							
26	Rxr	Rosa x 'Radtko'	Double Knock Out Rose	18" Ht.	24" ⊕ C.	Cont.	Full, Dense
19	Hpl	Hydrangea paniculata ' Limelight'	Limelight Hydrangea	30-36" Ht.		Cont.	Full, Dense
3	Bdv	Buddleja davidii	Butterfly Bush	18 - 24" Ht.		Cont.	Full, Dense
10	Spj	Spiraea japonica	Japanese Meadowsweet	24" Ht.		Cont.	Full, Dense
Evergreen Shrub							
75	Jsg	Juniperus chinensis 'Gold Lace'	Gold Lace Juniper	24 - 30" Spd.		B&B	
5	Jhp	Juniperus horizontalis 'Plumosa Compacta'	Compact Andorra Juniper	24 - 30" Spd.		B&B	
9	Bwg	Buxus microphylla 'Winter Gem'	Winter Gem Boxwood	24 - 30" Ht.		B&B	
5	Pmu	Pinus mugo 'ENCI'	ENCI Mugo Pine	30 - 36" Spd.		B&B	
30	Plo	Prunus laurocerasus 'Otto Luyken'	Otto Luyken Cherry Laurel	24 - 30" Ht.		B&B	
17	Pls	Prunus laurocerasus 'Schipkaensis'	Schip Laurel	24 - 30" Spd.		B&B	
24	Jsb	Juniperus squamata 'Blue Star'	Blue Star Juniper	18 - 24" Ht.		B&B	
27	Imm	Ilex x meserveae 'Mesog'	China Girl Holly	24 - 30" Ht.		B&B	
Grasses, Perennials and Groundcover							
130	Cld	Cotoneaster dammeri 'Coral Beauty'	Coral Beauty Bearberry Cotoneaster	15 - 18" Spd.	24" O.C.		
200	Lim	Liriope muscari	Big Blue Liriope	2 - 2.25" Pots	9" O.C.		
25	Cap	Carex pensylvanica	Pennsylvania Sedge	1 Gal.	18" O.C.		
4	Msc	Miscanthus sinensis 'Morning Light'	Morning Light Maiden Grass	3 Gal.			
120 sf	Sea	Seasonal Flowers	TBD	TBD			

Twinbrook Parkway Streetscape Schedule

Qty	Key	Botanical Name	Common Name	Size	Spacing	Type	Remarks
Ornamental Tree							
3	LIN	Lagerstroemia indica 'Natchez'	Natchez Crape Myrtle	12 - 14' Ht.	As Shown	B&B	Multi-trank, Well formed specimen
Grasses, Perennials and Groundcover							
156	Hed	Hedera helix	English Ivy	2.25" Pots	9" O.C.	Cont.	
124	Lmj	Liriope muscari 'John Birch'	John Birch Liriope	2.25" Pots	9" O.C.	Cont.	
209	Lmv	Liriope muscari 'Variegata'	Blue Variegated Lily Turf	2.25" Pots	9" O.C.	Cont.	
116	Hem	Hemerocallis 'Happy Returns'	Happy Returns Day Lily	1 Gal.	12" O.C.	Cont.	Plant in a row
108	Rbg	Rudbeckia 'Goldstrum'	Black-Eyed Susan	1 Gal.	12" O.C.	Cont.	Plant in a row
170	Nah	Narcissus 'Honeybird'	Trumpet Daffofil	Bulb	6" O.C.		Plant in double staggered row between liriope & perennial
400	Nam	Narcissus 'Mount Hood'	White Narcissus	Bulb	6" O.C.		Plant in double staggered row between liriope & perennial

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MICHAEL D. COLLIER

LANDSCAPE PLAN

LANDSCAPE PLAN
TWINBROOK PLACE
12501 ARDENNES AVE
LOT 5, BLOCK E

CITY OF ROCKVILLE (4TH) ELECTION DISTRICT, MONTGOMERY COUNTY, MARYLAND

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Planting Notes for Landscape Plans

NOVEMBER 2019

INSTALLATION OF PLANT MATERIAL

1. The Permittee is responsible for obtaining the approved Forest Conservation Plan/Landscape Plan and providing a copy to the Landscape Contractor. The Permittee shall ensure that the Landscape Contractor can secure the plants shown the FCP/Landscape Plan. Plant substitutions are not allowed. It is strongly recommended that plant material be secured from supplier by the project start date.

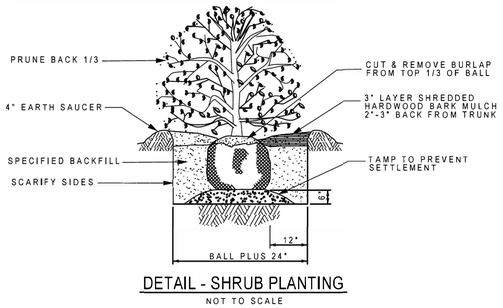
2. A pre-planting meeting is required before installation of landscaping, afforestation, or reforestation. The applicant must schedule an on-site pre-planting meeting with the City Forestry Inspector. Attendees must include the Permittee, landscape contractor, and Forestry Inspector. Trees and shrubs shall conform to the current edition of the American Standard for Nursery Stock (ANSI Z60.1).

3. Comply with appropriate City Soil Specification:
   - I. Soil Specification FOR TREE PLANTING WHERE EXISTING PAVEMENT OR OTHER IMPERVIOUS SURFACES WERE PREVIOUSLY LOCATED OR WHERE EXISTING GREENSPACE HAS BEEN SEVERELY DEGRADED[1]
     1. Site preparation
        a. Demolish existing impervious surface and remove all existing asphalt, concrete, stone and construction materials to expose subsoil free of debris.
        b. Excavate so that final planting bed will provide quality soil to a depth of forty-eight (48) inches, and to a radius of 10' minimum or to new hard edge of planting bed, whichever is less.
        c. Loosen exposed subsoil below 48" by ripping 18" into the sub grade elevation.
        d. Test to ensure that planting bed drains at a rate of at least 1 inch/per hour.
        e. Install imported soil to fill excavated planting bed. Imported soil shall have a texture of LOAM, per the USDA soil classification system and a chemical composition compatible with healthy tree growth. When installing the soil, it should be installed in lifts or layers of < 12 inches (30 cm), tamping or watering (not both) between lifts to minimize potential settling.
     2. Immediately prior to installation of plant material, the soil must be tested and must have a pH range between 5.5 and 7 and a nutrient content which corresponds to an adequate rating, per current industry standards. Amend soil, if necessary, to achieve the current industry standard.
     3. The Forestry Inspector may require additional soil specifications, based on site conditions.
   - II. Soil Specification FOR PLANTING WHERE EXISTING GREEN SPACE HAS NOT BEEN PROTECTED FROM CONSTRUCTION IMPACTS BUT IS NOT SEVERELY DEGRADED.
     1. Site Preparation:
        a. Remove all construction debris and top four to six inches of existing soil.
        b. Test remaining existing soil to verify a pH range between 5.5 and 7, and has a nutrient content which corresponds to an adequate rating, per current industry standards.
        c. Apply four (4) inches of mature compost evenly over the entire planting surface. (4" = 12 Cubic Yard/1,000 s.f.). Provide compost supplier information and specifications to the City Forestry Inspector for approval prior to install
        d. Till the compost into the existing soil to a minimum depth of thirty-six (36) inches using the city's soil profile rebuilding specification.
        e. If soil does not meet nutrient standards, mitigate soil chemistry to meet the chemical parameters.
     2. The Forestry Inspector may require additional soil specifications, based on site conditions.
   - III. Soil Specification FOR PLANTING WITHIN EXISTING GREEN SPACE AREAS WHICH HAVE BEEN PROTECTED FROM CONSTRUCTION IMPACTS (One of two options, as determined by Forestry Inspector) Refer to approved City of Rockville Detail A-7

[1] See definitions section #9

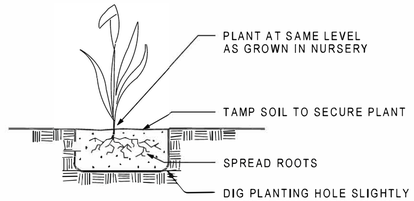
1. Test existing soil to verify it has a pH range between 5.5 and 7, and a nutrient content which corresponds to an adequate rating, per current industry standards. If soil does not meet nutrient standards, one of two options will be performed to mitigate the soil:
   - a. Option 1- Till Method- Depth of tilling for planting must be at least twenty-four (24) inches:
     - i. Apply four (4) inches of mature compost evenly over the entire planting surface (4" = 12 cubic yards/1,000 s.f.). Provide compost supplier information and specifications to the City Forestry Inspector for approval prior to install.
     - ii. Till the compost into the existing soil to a minimum depth of twenty-four (24") inches.
   - b. Option 2 – Aeration and Vertical Mulching
     - i. Using a 2- 3" Auger, drill a series of holes in the soil to a depth of twenty-four (24) inches.
     - ii. Begin at the edge of the hole dug for the root ball and continue drilling at one-foot intervals (maximum), in concentric rings around the tree out to ten (10) feet from the tree.
     - iii. Each hole must be refilled with mature compost.
   - c. The Forestry Inspector may require additional soil specifications, based on site conditions.
   - IV. Soil testing of the existing soil may be conducted with PRIOR approval from the City's Forestry Inspector to determine the number and location of the samples. The above requirements may be reduced if soil testing shows the following:
     1. Soil pH is between 5.5 and 7
     2. The top 24" of existing soil contains a minimum of 4-6% organic matter by weight
     3. The soil is free of contaminants
     4. The soil texture is sandy loam or loam
     5. The soil has an infiltration rate not less than 1" per hour
     6. The soil does not contain debris or stones greater than one inch
     7. The soluble salt content is less than 3 dS/m
     8. Consult the University of Maryland Extension website: http://extension.umd.edu/ for a listing of commercial soil testing facilities.
   - V. Soil preparation is required for street trees planted within the city's rights-of-way and private street trees, if they are part of the approved plan.
4. The depths and grades shown on plan drawings are final grades after settlement and shrinkage of the organic material. The contractor shall install the soil mix at a higher level to anticipate this reduction of volume. All grades are assumed to be "as measured" to be prior to the addition of any surface compost till layer or mulch or sod.
5. All details of the planting plans regarding plant quality and proper planting will be discussed including but not limited to:
   - a. Plant quality.
   - b. Proper form for species.
   - c. Proper ratio of caliper size/height to container size/root ball size.
   - d. Proper pruning cuts if applicable in accordance with current ANSI A300 pruning standards (generally there should be no recent pruning).
   - e. No co-dominant stems or multiple trunks (unless approved by FCP or by The Forestry Inspector).
   - f. Sound graft union.
   - g. Free of girdling roots, or the ability to remove girdling roots without damaging the tree.
   - h. Trees shall be healthy, vigorous, insect/disease free, and without cankers/cracks or trunk damage.
6. Proper installation
   - a. Root flare no higher than 3 inches from existing grade.
   - b. Exposed root flare (not graft); removing more than several inches of soil to expose the root flare may result in the rejection of the plant material.
   - c. Wire baskets/twine/burlap removed from at least the top half of root ball, or as directed by Forestry Inspector.
   - d. All burlap or twine removed completely.
   - e. No hose and wire; staking and strapping per City planting detail.
   - f. Planting Hole a minimum of twice the width of the root ball; could be greater. Planting detail assumes soil has been prepared per the city's specifications (Planting, #3).
   - g. Mulched properly, per City planting detail.
   - h. Wildlife protection installed, if required; type approved by the Forestry Inspector.
7. Trees not complying with the above requirements may be rejected at the discretion of the City Forestry Inspector.

8. Tree planting will generally not be permitted between the dates of June 1 and September 1, or when the ground is frozen.
9. DEFINITIONS
   - a. Topsoil
     - i. Soil can be considered topsoil if it originates from an A horizon of a natural soil or is a mineral soil with 4-6%% organic matter content, and a NRCS textural class similar to pre-development conditions A horizon soils for the site, or as specified by the City Forestry Division. The city Forestry Division will specify a LOAM texture in the absence of native conditions listed above. Blended soils shall not be used unless specified by the City Forestry Division. In addition, topsoil shall:
       1. Be friable and well drained
       2. Have a pH between 5.5-7.
       3. Have an organic matter content between 4-6%.
       4. Have low salinity as indicated by a soluble salt content which is less than 3 dS/m
       5. Be free of debris, stone, gravel, trash, large sticks, heavy metals, and other deleterious contaminants, (if screening is used to remove debris, screen size must be ¼ inch or larger).
       6. Have a nutrient profile such that it has an adequate rating, per current industry standards.
       7. Be free of noxious weed seeds
   - b. Compost
     - i. Compost shall be composed of leaves, yard waste, or food waste. Biosolid-based composts shall not be used. A compost sample with analysis shall be submitted for approval to the City Forestry Division before application.
     - ii. Stability refers to the rate of biological breakdown, measured by carbon dioxide release. Maturity refers to completeness of the aerobic composting process and suitability (lack of plant toxicity) as a plant growth media, often measured by ammonia release and by plant growth tests. Compost manufacturers that subscribe to the US Composting Council's testing program may document stability as compost testing 7 or below in accordance with TMECC 05.08-B, "Carbon Dioxide Evolution Rate". Maturity (suitability for plant growth) may be documented as compost testing greater than 80% in accordance with TMECC 05.05-A, "Germination and Vigor". Compost is considered mature and stable if it tests at 6.0 or higher on the Solvita Compost Maturity Index Rating, which is a combination of Carbon Dioxide and Ammonia Maturity Tests (test information and equipment available at www.solvita.com).
     - iii. Compost shall also be:
       1. Free of weed seeds.
       2. Free of heavy metals or other deleterious contaminants.
       3. Have a soluble salt content which is less than 3 dS/m.
   - c. Severely Degraded Soil
     - i. Soil shall be considered severely degraded if grade was lowered or raised more than 14 inches OR soil was compacted in lifts regardless of the final grade OR was used as a staging area for construction materials, equipment or processes.



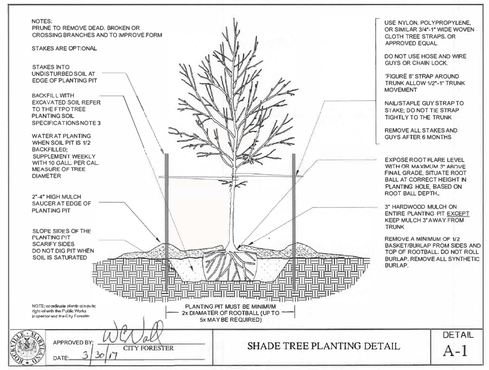
DETAIL - SHRUB PLANTING

NOT TO SCALE



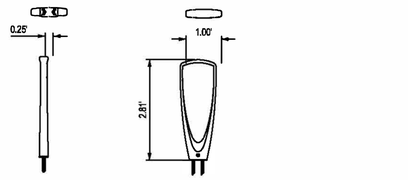
HERBACEOUS PLANTING DETAIL

NOT TO SCALE



APPROVED BY: CITY FORESTER — DATE: 3/30/17

SHADE TREE PLANTING DETAIL — DETAIL A-1



BIKE RACK, TYP.

Manufacturer: Forms + Surfaces
Product Name: Trio Bike Rack
Model #: SKTRO-TD
Quantity: 5

Notes:
- Or approved equal

Soil Profile Rebuilding Specification

NOVEMBER 2019

Specification for Restoration of Graded and Compacted Soils that will be Vegetated

Based on Specifications developed At Virginia Polytechnic Institute- Department of Horticulture

1. PURPOSE AND DESCRIPTION

1.1 Purpose

Soil Profile Rebuilding is an appropriate soil restoration technique for sites where topsoil has been completely or partially removed and subsoil layers have been compacted (graded and/or trafficked by equipment). It may also be used with some modifications if topsoil is present. This is not an appropriate technique in sites with surface compaction only (6 inches or less), although this situation is rare on construction sites. This technique is not appropriate within the root zones of trees that are to be protected. Soil Profile Rebuilding can improve physical and biological characteristics of soil to allow for revegetation. Soil chemical problems, soil contamination from heavy metals, pathogens, or excessive debris or gravel shall be addressed separately.

1.2 Description of Procedure

The procedure includes a subsoiling procedure, addition of organic matter in the form of compost, replacement or addition of topsoil, and subsequent planting with woody plants. The soil preparation portion of Soil Profile Rebuilding puts the components in place for restoration to characteristics similar to undisturbed soils, however, the complete restoration process requires root activity and occurs over many years. This technique may be appropriate for restoration of disturbed soils as defined by SITES™.

1.3 Expected Outcomes

Soil Profile Rebuilding may improve vegetation establishment, increase tree growth rates, increase soil permeability, enhance formation of aggregates in the subsoil, and enhance long-term soil carbon storage.

2. PROCEDURE

2.1 Location6

Profile Rebuilding shall occur on all soil areas that are to be vegetated that have been disturbed by trafficking or grading during construction or prior to construction. Soil areas that are not to be treated should be protected by permanent fencing during the construction period, and all access to these areas prohibited. A soil map delineating protected areas and areas to be treated shall be approved by the forestry inspector before grading or construction begins.

2.2 Sequencing

Profile Rebuilding shall occur after site disturbance is complete, including all vehicle and equipment trafficking, but before replacement of topsoil. Once profile rebuilding is complete, all traffic and equipment or materials storage on treated areas is prohibited, with the exception of foot traffic, for the purposes of planting or mulching.If topsoil is already present and is 4 inches or greater in depth, use the "modifications for pre- existing topsoil (2.62)."

2.3 Remove foreign materials

Remove all foreign materials resulting from construction operations, including oil drippings, stone, gravel, and other construction materials from the existing soil surface.

2.4 Application of Compost

Spread mature, stable compost to a 4 inch depth over compacted subsoil (see Section 3. Definitions for definition of compost).

2.5 Subsoiling

Subsoiling may be performed when soil is neither wet nor dry. If a shovel cannot be forced into the soil, it is too dry. If the surface is sticky or muddy, it is too wet. Use a mini-backhoe or similar equipment with a narrow (less than 24"), tined bucket to break up the compacted soil and incorporate the compost. Work backwards away from excavated soils so that treated soil is not trafficked by the equipment. Insert the bucket through the compost layer and into the subsoil to a depth of thirty-inches (36"), and raise a bucket of soil at least twenty-four inches above the soil surface.

Tip the bucket and allow soil to fall. Repeat this procedure until no clumps of compacted soil larger than 12 inches in diameter remain. The tines of the bucket can be used to break apart larger clumps if necessary. 50% of the soil shall be in clumps 6 inches or smaller. No clumps shall be greater than 18" in diameter. The subsoiling is not intended to homogenize the compost and soil, but rather loosen the soil to a thirty-six inch depth and create veins of compost down to that depth as well. To ensure that subsoiling reached the appropriate depth, a push tube soil sampler shall be used to verify compost is present at thirty-six inch depth.

2.6 Replacement of topsoil

2.6.1 Standard procedure

Stockpiled topsoil, or additional topsoil if none is available from the site, shall be returned to the site to a four (4) inch minimum depth (see *Section 3.3 Definitions* for definition of topsoil). If soil was severely disturbed (see definitions), a six (6) to eight (8) inch minimum shall be replaced with topsoil that meets city standards.

2.6.2 Modification if significant topsoil is already present before Profile Rebuilding is initiated

Case 1:

At least four inches of topsoil is present on the site after construction activities are completed AND soil is not severely disturbed (see *Section 3.3 Definitions* for description of severely disturbed).

Case 2:

Less than four inches of topsoil is present on site after construction activities were completed but before Profile Rebuilding is initiated, OR soil is severely disturbed (see *Section 3.3 Definitions* for description of severely disturbed).

For Case 1: A minimum of three inches additional topsoil shall be placed over the subsoiled layer before tilling.

For Case 2: Follow *Section 2.6.1 Standard procedure*, as if no topsoil had been present.

2.7 Tilling

Rototill topsoil to a depth of six to eight inches when soil is neither dry nor very moist. Rototilling depth should cross the interface with the subsoiled layer by a minimum of one (1) inch and can be verified with a random sampling with a push tube soil sampler.

2.8 Planting

Plant the site with woody plants, trees or shrubs, at a density that insure a minimum of 50% of the site will be occupied with roots within 10 years. Planting of at least one large stature tree (e.g., one that will mature at approximately 60-70 feet in height) or 20 medium stature shrubs per 5,000 sq. ft. shall be considered to achieve this.

3. DEFINITIONS

3.1 Topsoil

Soil can be considered topsoil if it originates from an A horizon of a natural soil or is a mineral soil with 4-6%% organic matter content, and a NRCS textural class similar to pre-development conditions A horizon soils for the site, or as specified by the City Forestry Division. The city Forestry Division will specify a LOAM texture in the absence of native conditions listed above. Blended soils shall not be used unless specified by the City Forestry Division. In addition, topsoil shall:

1. Be friable and well drained
2. Have a pH between 5.5-7.
3. Have an organic matter content between 4-6%.
4. Have low salinity as indicated by a soluble salt content which is less than 3 dS/m
5. Be free of debris, stone, gravel, trash, large sticks, heavy metals, and other deleterious contaminants, (if screening is used to remove debris, screen size must be ¼ inch or larger).
6. Have a nutrient profile such that it has an adequate rating, per current industry standards.
7. Be free of noxious weed seeds

3.2 Compost

Compost shall be composed of leaves, yard waste, or food waste. Biosolid-based composts shall not be used. A compost sample with analysis shall be submitted for approval to the City Forestry Division before application.

Stability refers to the rate of biological breakdown, measured by carbon dioxide release. Maturity refers to completeness of the aerobic composting process and suitability (lack of plant toxicity) as a plant growth media, often measured by ammonia release and by plant growth tests. Compost manufacturers that subscribe to the US Composting Council's testing program may document stability as compost testing 7 or below in accordance with TMECC 05.08-B, "Carbon Dioxide Evolution Rate". Maturity (suitability for plant growth) may be documented as compost testing greater than 80% in accordance with TMECC 05.05-A, "Germination and Vigor". Compost is considered mature and stable if it tests at 6.0 or higher on the Solvita Compost Maturity Index Rating, which is a combination of Carbon Dioxide and Ammonia Maturity Tests (test information and equipment available at www.solvita.com).

Compost shall also:

1. Free of weed seeds.
2. Free of heavy metals or other deleterious contaminants.
3. Have a soluble salt content which is less than 3 dS/m.

3.3 Severely Degraded Soil

Soil shall be considered *severely degraded* if grade was lowered or raised more than 14 inches OR soil was compacted in lifts regardless of the final grade OR was used as a staging area for construction materials, equipment or processes.

4. SUBMITTALS

4.1 Soil Map

A soil map indicating soil areas to be protected and those to be restored via Soil Profile Rebuilding shall be submitted by the contractor for approval to the City Forestry Division before construction begins.

4.2 Compost

A compost sample with analysis certifying it is stable, mature, from acceptable feedstocks and free of contaminants and weed seeds shall be submitted for approval to the City Forestry Division before compost is applied to the soil.

4.3 Topsoil

A topsoil sample with analysis from a certified testing laboratory and verification of source shall be submitted for approval to by the City Forestry Division before application. Separate documentation is required for each 100 cubic yards of topsoil unless otherwise approved by the City Forestry Division.

5. REFERENCES & PERMISSIONS

Use of this specification has been documented to increase tree canopy and soil carbon stores compared with typical practices. See www.urbanforestry.frec.vt.edu/SRES for more information.

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Engineering
Surveying
Planning
Environmental Sciences

NO.	REVISIONS	BY	DATE

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INFORMATION CONCERNING EXISTING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES AND UTILITY CROSSINGS BY DIGGING TEST PITS BY HAND, WELL IN ADVANCE OF THE START OF EXCAVATION. CONTACT "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE ENGINEER AND THE UTILITY COMPANY BEFORE PROCEEDING WITH CONSTRUCTION. CLEARANCES LESS THAN NOTED MAY REQUIRE REVISIONS TO THIS PLAN.

OWNER / DEVELOPER / APPLICANT

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C/O UNIWEST DEVELOPMENT LLC
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FALL CHURCH, VA 22042-1032
(703) 698-4042

MICHAEL D. COLLIER

NOTES AND DETAILS

LANDSCAPE PLAN
TWINBROOK PLACE
12501 ARDENNES AVE
LOT 5, BLOCK E
CITY OF ROCKVILLE (4TH) ELECTION DISTRICT, MONTGOMERY COUNTY, MARYLAND

TAX MAP: GQ63	ZONING CATEGORY: MXE
WSSC 200' SHEET: 216NW06	SITE DATUM HORIZONTAL: VERTICAL:
1" = NTS	DATE: 8/31/2023; DESIGNED: NC; TECHNICIAN: NC; CHECKED: DHP; CAD STD'S. VERSION: CONNECT / NCS
SHEET: LP-2	
PROJECT NO.: 1047-01-00	

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REFERENCE GRID A B C D E F G H I J K L M N O

SIGNIFICANT TREE SUMMARY CHART											
NRI/FSD							PFCP/FCP				
#	SCIENTIFIC NAME	COMMON NAME	DBH	Area CRZ	CTLA %	Remarks	DISPOSTION (SAVE/REMOVE)	% CRZ IMPACT	REPLACEMENT REQ.	CREDIT FOR CRZ?	Proposed Credit (1/4 OF CRZ Area Max)
LANDSCAPE SETTING (NO EXISTING CREDIT) CRZ=1"DBH=1.5'RADIUS. SIGNIFICANT>/= 12"DBH											
244	*Quercus rubra*	Northen Red Oak	10	707		Not eligible for credit, within PUE	Save	9%	0		N/A
246	*Quercus rubra*	Northen Red Oak	10	707		Not eligible for credit, within PUE	Save	0%	0		N/A
247	*Cercis candensis*	Eastern Redbud	7	346		Not eligible for credit, within PUE	Save	0%	0		N/A
248†	*Liriodendron tulipifera*	Tulip Tree	36	9156			Save	0%	0		N/A
249	*Acer rubrum*	Red Maple	7	346		Not eligible for credit, within PUE	Save	0%	0		N/A
250	*Liriodendron tulipifera*	Tulip Tree	8	452		Not eligible for credit, within PUE	Save	0%	0		N/A
252	*Acer rubrum*	Red Maple	20	2826			Save	0%	0		N/A
254	*Liriodendron tulipifera*	Tulip Tree	11	855			Save	0%	0		N/A
261	*Pinus strobus*	Eastern White Pine	20	2826			Save	0%	0		N/A
266	*Acer rubrum*	Red Maple	20	2826			Save	0%	0		N/A
267†	*Liriodendron tulipifera*	Tulip Tree	35	8655			Save	0%	0		N/A
269	*Liriodendron tulipifera*	Tulip Tree	26	4776			Save	0%	0		N/A
274	*Prunus avium*	Sweet Cherry	13	1194			Save	0%	0		N/A
†Specimen size tree								TOTAL:	0		0
6-11" DBH TREES (NO EXISTING CREDIT) CRZ-PER LOCATION AS ABOVE; REQURIED FOR FCP, OPTIONAL FOR NRI											
91	*Robina pseudoacacia*	Black Locust	6, 4, 3	1017			Save	0%	0		N/A
251	*Prunis avium*	Sweet Cherry	8	452			Save	0%	0		N/A
258	*Prunis avium*	Sweet Cherry	11	855			Save	0%	0		N/A
260	*Prunis avium*	Sweet Cherry	9	572			Save	0%	0		N/A
263	*Prunis avium*	Sweet Cherry	9	572			Save	0%	0		N/A
								TOTAL:	0		0
OFFSITE (NO EXISTING CREDIT)											
300	*Acer negundo*	Boxelder	12, 12, 4, 4	5150			Save	0%	0		
85	*Lagerstroemia indica*	Black Cherry	10	692			Save	0%	0		
STREET TREES OF ANY SIZE CRZ-1"DBH=1.5'RADIUS STREET TREES MAY HAVE PRIOR FCP CREDIT (Tree number must include F if previous FCP credit was assigned)											
278	*Syringa reticulata*	Japanese Tree Lilac	6	254			Save	0%	0		N/A
279	*Syringa reticulata*	Japanese Tree Lilac	6	254			Save	0%	0		N/A
280	*Syringa reticulata*	Japanese Tree Lilac	6	254			Save	0%	0		N/A
281	*Syringa reticulata*	Japanese Tree Lilac	6	254			Save	0%	0		N/A
282	*Syringa reticulata*	Japanese Tree Lilac	7	346			Save	0%	0		N/A
283	*Syringa reticulata*	Japanese Tree Lilac	6	254			Save	0%	0		N/A
284	*Syringa reticulata*	Japanese Tree Lilac	7	346			Save	0%	0		N/A
285	*Syringa reticulata*	Japanese Tree Lilac	6	254			Save	0%	0		N/A
286F	*Lagerstoemia indica*	Crape Mytrle	9	572			Save	0%	0		200
287F	*Lagerstoemia indica*	Crape Mytrle	9	572			Save	0%	0		200
288F	*Lagerstoemia indica*	Crape Mytrle	11	855			Save	0%	0		200
							TOTAL PREVIOUS CREDIT:				600
PREVIOUS FOREST CONSERVATION CREDIT (Tree number must include F)											
242F	*Quercus rubra*	Northen Red Oak	6	254			Save	28%	0		400
243F	*Quercus rubra*	Northen Red Oak	10	707			Remove	40%	0		0
245S	*Acer rubrum*	Red Maple	9	572			Save	0%	0		400
253F	*Quercus rubra*	Northen Red Oak	12	1017			Save	0%	0		400
270F	*Cercis candensis*	Eastern Redbud	8	452			Save	0%	0		200
272F	*Cercis candensis*	Eastern Redbud	7	346			Save	0%	0		200
277F	*Quercus rubra*	Northen Red Oak	10	707			Save	0%	0		400
289F	*Prunus spp.*	Cherry/Plum spp.	10	707			Save	0%	0		200
292F	*X Cupressocyparis leylandii*	Leyland Cypress	13	1194			Save	0%	0		200
293F	*X Cupressocyparis leylandii*	Leyland Cypress	12	1017			Save	0%	0		200
294F	*X Cupressocyparis leylandii*	Leyland Cypress	13	1194			Save	0%	0		200
295F	*X Cupressocyparis leylandii*	Leyland Cypress	12	1017			Save	0%	0		200
296F	*X Cupressocyparis leylandii*	Leyland Cypress	14	1385			Save	0%	0		200
297F	*X Cupressocyparis leylandii*	Leyland Cypress	12	1017			Save	0%	0		200
298F	*X Cupressocyparis leylandii*	Leyland Cypress	12	1017			Save	0%	0		200
299F	*X Cupressocyparis leylandii*	Leyland Cypress	7	346			Save	0%	0		200
400F	*Ilex crenata* 'Fosteri'	Fosteri Holly		0			Save	0%	0		200
401F	*Ilex crenata* 'Fosteri'	Fosteri Holly		0			Save	0%	0		200
402F	*Ilex crenata* 'Fosteri'	Fosteri Holly		0			Save	0%	0		200
403F	*Ilex crenata* 'Fosteri'	Fosteri Holly		0			Save	0%	0		200
404F	*Ilex crenata* 'Fosteri'	Fosteri Holly		0			Save	0%	0		200
405F	*Ilex crenata* 'Fosteri'	Fosteri Holly		0			Save	0%	0		200
406F	*Ilex crenata* 'Fosteri'	Fosteri Holly		0			Save	0%	0		200
407F	*Ilex crenata* 'Fosteri'	Fosteri Holly		0			Save	0%	0		200
408F	*Thuja occidentalis* 'Emerald'	Emerald Arborvitae		0			Save	0%	0		200
409F	*Thuja occidentalis* 'Emerald'	Emerald Arborvitae		0			Save	0%	0		200
410F	*Thuja occidentalis* 'Emerald'	Emerald Arborvitae		0			Save	0%	0		200
411F	*Thuja occidentalis* 'Emerald'	Emerald Arborvitae		0			Save	0%	0		200
412F	*Thuja occidentalis* 'Emerald'	Emerald Arborvitae		0			Save	0%	0		200
413F	*Thuja occidentalis* 'Emerald'	Emerald Arborvitae		0			Save	0%	0		200
414F	*Lagerstoemia indica*	Crape Mytrle		0			Save	0%	0		200
415F	*Lagerstoemia indica*	Crape Mytrle		0			Save	0%	0		200
							TOTAL PREVIOUS CREDIT:				7000
PREVIOUS SIGNIFICANT TREE REPLACEMENT CREDIT (Tree Number must include S) REPLACED AT 1 TO 1											
86S	*Quercus bicolor*	Swamp White Oak	9	572			Save	0%	0		1
87S	*Quercus bicolor*	Swamp White Oak	9	572			Save	0%	0		1
88S	*Quercus bicolor*	Swamp White Oak	10	707			Save	0%	0		1
89S	*Quercus bicolor*	Swamp White Oak	10	707			Save	0%	0		1
90S	*Quercus bicolor*	Swamp White Oak	7	346			Save	0%	0		1
255S	*Acer rubrum*	Red Maple	13	1194			Save	0%	0		1
256S	*Nyssa sylvatica*	Blackgum	8	452		Credit from Proposed Green Ash	Save	0%	0		1
257S	*Quercus rubra*	Northen Red Oak	8	452		Credit from Proposed Green Ash	Save	0%	0		1
259S	*Acer rubrum*	Red Maple	7	346			Save	0%	0		1
262S	*Acer rubrum*	Red Maple	10	707			Save	0%	0		1
264S	*Quercus alba*	White Oak	13	1194		Credit from Proposed Green Ash	Save	0%	0		1
265S	*Liriodendron tulipifera*	Tulip Tree	6	254			Save	0%	0		1
268S	*Liriodendron tulipifera*	Tulip Tree	17	2042			Save	0%	0		1
273S	*Acer rubrum*	Red Maple	10	707			Save	0%	0		1
275S	*Acer rubrum*	Red Maple	9	572			Save	0%	0		1
271S	*Quercus rubra*	Northen Red Oak	8	452		Credit from Proposed Green Ash	Save	0%	0		1
276S	*Ulmus americana*	American Elm	10	707		Credit from Proposed Green Ash	Save	0%	0		1
290S	*Prunus spp.*	Cherry/Plum spp.	10	707			Save	0%	0		1
291S	*Prunus spp.*	Cherry/Plum spp.	9	572			Save	0%	0		1
							AL PREVIOUS SIG TREE REPLACEMENT:				19
							TOTAL FOREST CONSERVATION CREDIT PER FTP2002-00001:				8000
							TOTAL SIG TREE REPLACEMENT PER FTP2002-00001:				24
							REMAINING FOREST CONSERVATION CREDIT:				400
							REMAINING SIG TREE CREDIT:				5

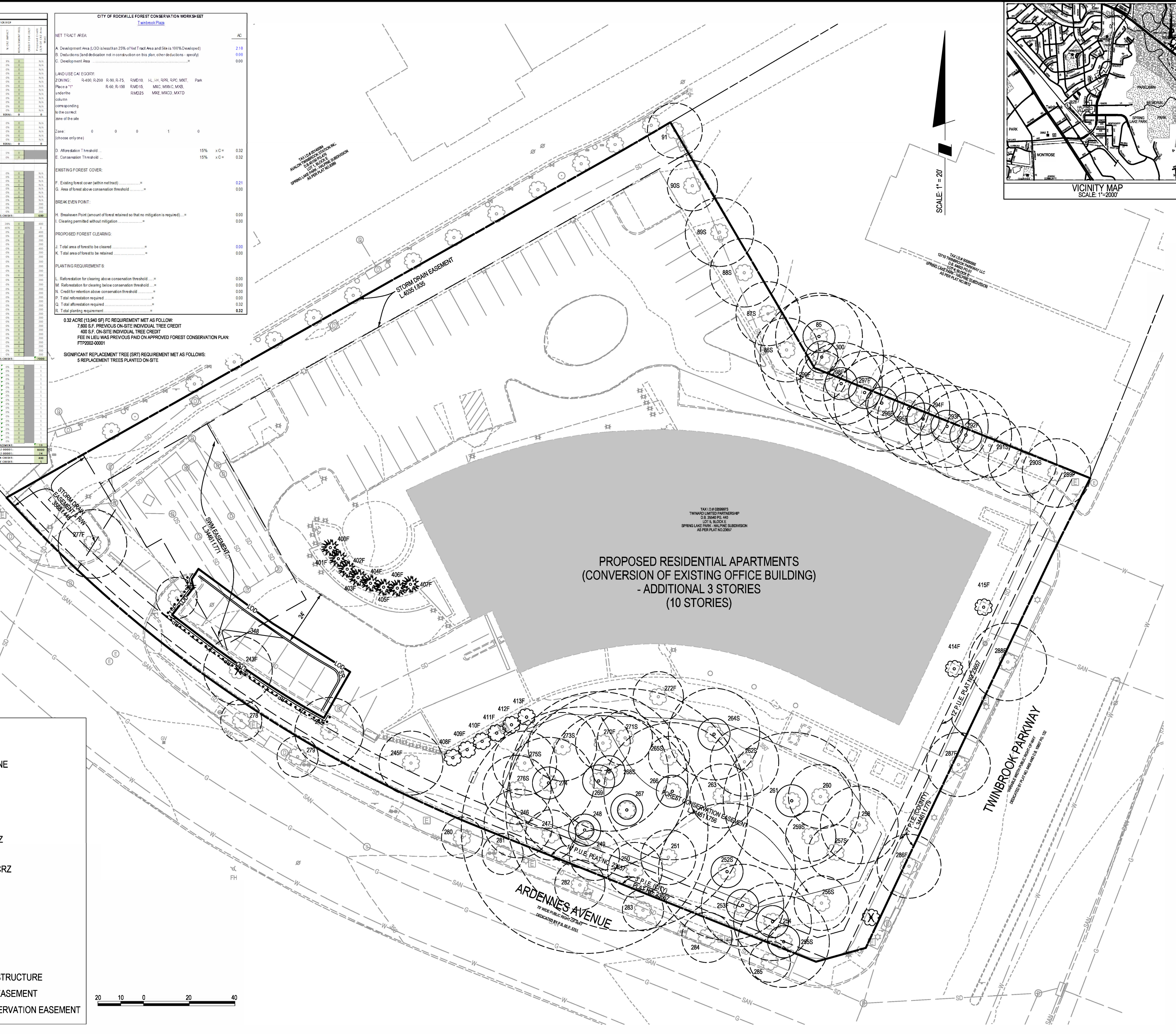
CITY OF ROCKVILLE FOREST CONSERVATION WORKSHEET

Twinbrook Plaza

NET TRACT AREA:				AC
A. Development Area (LOD is less than 25% of Net Tract Area and Site is 100% Developed)				2.10
B. Deductions (land dedication not in construction on this plan, other deductions - specify)				0.00
C. Development Area .... =				0.00
LAND USE CATEGORY:				
ZONING: R-400, R-200 / R-90, R-75, R-60, R-150 / RMD10, RMD15, RMD25 / I-L, I-H, RPR, RPC, MXT, MXC, MXNC, MXB, MXE, MXCD, MXTD / Park				
Place a "1" under the column corresponding to the correct zone of the site				
Zone: 0 / 0 / 0 / 1 / 0 (choose only one)				
D. Afforestation Threshold ...	15%	x C =		0.32
E. Conservation Threshold ...	15%	x C =		0.32
EXISTING FOREST COVER:				
F. Existing forest cover (within net tract) .... =				0.21
G. Area of forest above conservation threshold .... =				0.00
BREAK EVEN POINT:				
H. Breakeven Point (amount of forest retained so that no mitigation is required)....=				0.00
I. Clearing permitted without mitigation .... =				0.00
PROPOSED FOREST CLEARING:				
J. Total area of forest to be cleared .... =				0.00
K. Total area of forest to be retained .... =				0.00
PLANTING REQUIREMENTS:				
L. Reforestation for clearing above conservation threshold .....=				0.00
M. Reforestation for clearing below conservation threshold ....=				0.00
N. Credit for retention above conservation threshold ....=				0.00
P. Total reforestation required ....=				0.00
Q. Total afforestation required ....=				0.32
R. Total planting requirement ....=				0.32

0.32 ACRE (13,940 SF) FC REQUIREMENT MET AS FOLLOW:
7,600 S.F. PREVIOUS ON-SITE INDIVIDUAL TREE CREDIT
400 S.F. ON-SITE INDIVIDUAL TREE CREDIT
FEE IN LIEU WAS PREVIOUS PAID ON APPROVED FOREST CONSERVATION PLAN: FTP2002-00001

SIGNIFICANT REPLACEMENT TREE (SRT) REQUIREMENT MET AS FOLLOWS:
5 REPLACEMENT TREES PLANTED ON-SITE



VICINITY MAP
SCALE: 1"=2000'

Community Planning & Development Services
Received
September 6, 2023

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- LOD — LIMIT OF DISTURBANCE
- TSF — TREE SAVE FENCE
- RP — ROOT PRUNING
- SPECIMEN TREE AND CRZ
- SIGNIFICANT TREE AND CRZ
- TREE TO BE REMOVED
- EXISTING BUILDING
- EXISTING CONTOUR
- EXISTING LIGHTS
- EXISTING STORMDRAIN STRUCTURE
- EXISTING STORMDRAIN EASEMENT
- EXISTING FOREST CONSERVATION EASEMENT

20 10 0 20 40

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NO.	REVISIONS	BY	DATE

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MICHAEL D. COLLIER

STATE OF MARYLAND
DANIEL H. PARK
3894
LANDSCAPE ARCHITECT

TREE REMOVAL PLAN

FOREST CONSERVATION PLAN
TWINBROOK PLACE
12501 ARDENNES AVE
LOT 5, BLOCK E
CITY OF ROCKVILLE (4TH) ELECTION DISTRICT, MONTGOMERY COUNTY, MARYLAND

TAX MAP: GQ63	ZONING CATEGORY: MXE
WSSC 200' SHEET: 216NW06	SITE DATUM HORIZONTAL: ______ VERTICAL: ______
ONE INCH; 1" = 20'	DATE: 8/25/2023; DESIGNED: NC; TECHNICIAN: NC; CHECKED: DHP; CAD STD'S. VERSION: CONNECT / NCS
SHEET FCP-1	
PROJECT NO. 1047-01-00	

1 2 3 4 5 6 7 8 9 10 11

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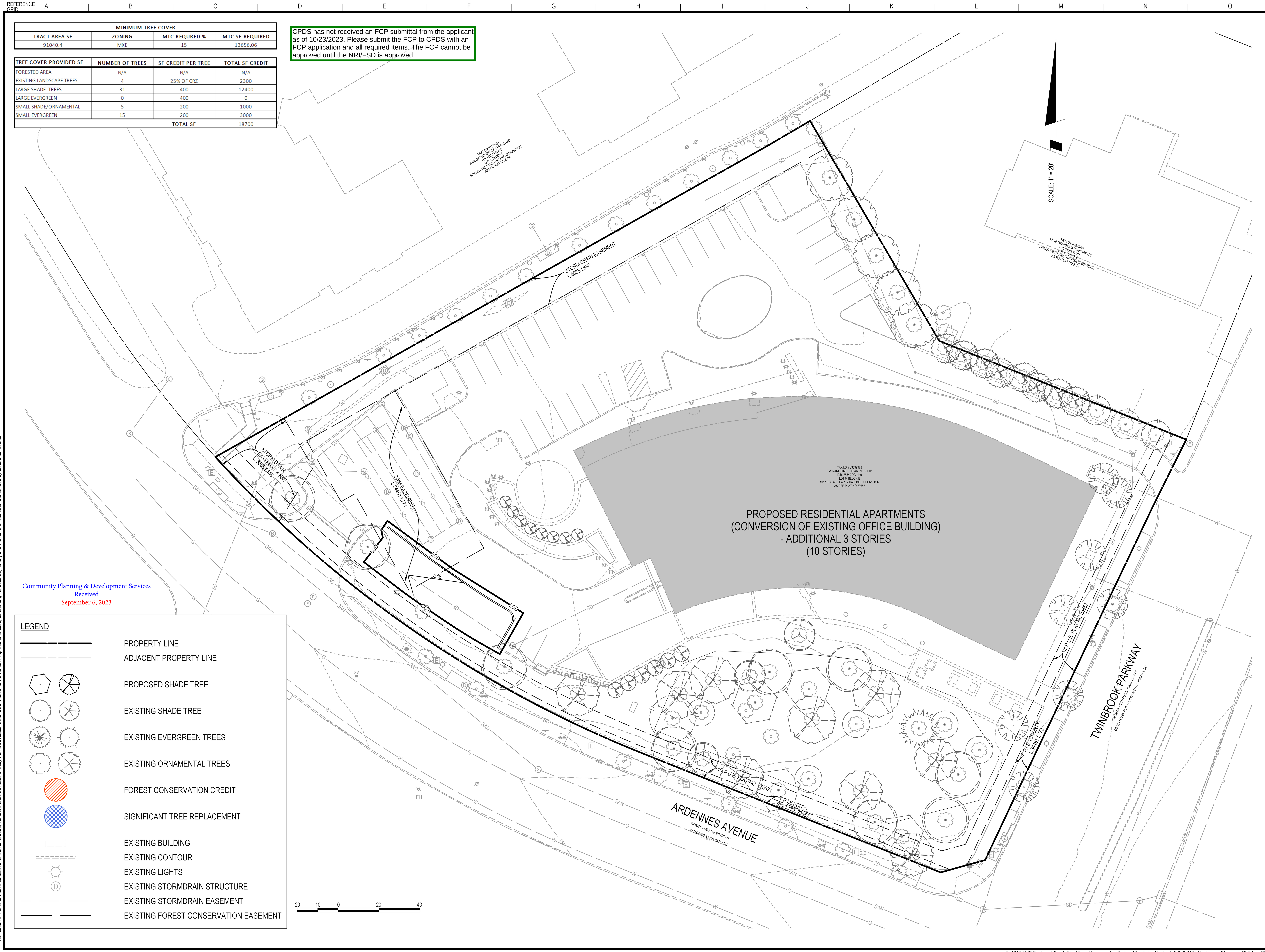
MINIMUM TREE COVER			
TRACT AREA SF	ZONING	MTC REQURED %	MTC SF REQUIRED
91040.4	MXE	15	13656.06

TREE COVER PROVIDED SF	NUMBER OF TREES	SF CREDIT PER TREE	TOTAL SF CREDIT
FORESTED AREA	N/A	N/A	N/A
EXISTING LANDSCAPE TREES	4	25% OF CRZ	2300
LARGE SHADE TREES	31	400	12400
LARGE EVERGREEN	0	400	0
SMALL SHADE/ORNAMENTAL	5	200	1000
SMALL EVERGREEN	15	200	3000
		TOTAL SF	18700

CPDS has not received an FCP submittal from the applicant as of 10/23/2023. Please submit the FCP to CPDS with an FCP application and all required items. The FCP cannot be approved until the NRI/FSD is approved.



Community Planning & Development Services
Received
September 6, 2023

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- PROPOSED SHADE TREE
- EXISTING SHADE TREE
- EXISTING EVERGREEN TREES
- EXISTING ORNAMENTAL TREES
- FOREST CONSERVATION CREDIT
- SIGNIFICANT TREE REPLACEMENT
- EXISTING BUILDING
- EXISTING CONTOUR
- EXISTING LIGHTS
- EXISTING STORMDRAIN STRUCTURE
- EXISTING STORMDRAIN EASEMENT
- EXISTING FOREST CONSERVATION EASEMENT

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STATE OF MARYLAND
DANIEL H. PARK
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LANDSCAPE ARCHITECT

FOREST CONSERVATION PLAN

FOREST CONSERVATION PLAN
TWINBROOK PLACE
12501 ARDENNES AVE
LOT 5, BLOCK E
CITY OF ROCKVILLE (4TH) ELECTION DISTRICT, MONTGOMERY COUNTY, MARYLAND

TAX MAP: GQ63	ZONING CATEGORY: MXE
WSSC 200' SHEET: 216NW06	SITE DATUM HORIZONTAL: ____ VERTICAL: ____
ONE INCH 1" = 20'	DATE: 8/25/2023 DESIGNED: NC TECHNICIAN: NC CHECKED: DHP CAD STD'S. VERSION: CONNECT / NCS
SHEET FCP-2	
PROJECT NO. 1047-01-00	

REFERENCE GRID A B C D E F G H I J K L M N O

Forest and Tree Preservation Ordinance Notes

NOVEMBER 2019

SEQUENCE OF EVENTS

The permittee is responsible for strict adherence to the sequence and details as outlined. During each stage of the project, forestry staff may provide additional direction based on site conditions, unforeseen circumstances, or approved revisions.

PRE-CONSTRUCTION

1. Permittee shall obtain a Forestry Permit (FTP) for the project and secure copies of the approved Forest Conservation Plan (FCP) for distribution to contractors. The Permittee is responsible for obtaining a Maryland Roadside Tree Permit if applicable. Contact Miss Utility at 1-800 257-7777.

2. The Permittee must coordinate and schedule an onsite preconstruction meeting with the following attendees: Permittee, Construction Superintendent, Maryland LTE/ISA Certified Arborist (if required by Forestry Department), the City Forestry Inspector, City Project Inspector, and City Sediment Control Inspector. The limits of disturbance must be staked and flagged prior to the preconstruction meeting. No land disturbance shall occur prior to this meeting. This includes, but is not limited to, the installation of tree protection fencing, sediment control measures, clearing, grading and tree stress reduction measures. The limits of disturbance will be reviewed, and tree protection and tree care measures will be discussed.

3. No land disturbance shall begin before stress-reduction measures as indicated on the approved FCP, or otherwise directed by the Forestry Inspector have been implemented and approved by Forestry Inspector. Measures not specified on the plan may be required as determined by the Forestry Inspector in consultation with the Permittee's MD LTE/ISA Certified Arborist. Appropriate stress-reduction measures may include, but are not limited to:
   a. Root pruning
   b. Crown reduction or pruning
   c. Watering
   d. Fertilizing
   e. Surface mulching
   f. Vertical mulching
   g. Root aeration matting

4. A professional with the dual credentials of Maryland Department of Natural Resources Licensed Tree Expert (LTE) and International Society of Arboriculture Certified Arborist (ISA CA) must perform all stress reduction measures. Documentation of these qualifications may be required. The measures must be done in accordance with *ANSI Standards for Tree Care Operations* (A300) and other industry best management practices. Implementation of the stress reduction measures must be observed by the Forestry Inspector or written documentation, including photographs must be sent via mail or email to the City Forestry Inspector.

5. Temporary tree protection devices, including signage, shall be installed per the approved Forest Conservation Plan, or as otherwise directed by the Forestry Inspector, and prior to any land disturbance. Tree protection fencing locations must be staked and flagged prior to the pre-construction meeting. The Forestry Inspector, in coordination with the City Sediment Control Inspector, may make field adjustments to increase the survivability of trees and forest shown as saved on the approved plan. The Permittee must contact the Forestry Inspector to schedule a follow up construction inspection after installing all tree protection measures and performing all stress reduction measures. Upon a satisfactory inspection by the Forestry Inspector and Sediment Control Inspector, a Notice to Proceed will be issued and clearing and grading can commence. Temporary tree protection devices may include:
   a. Chain link fence (four feet high)
   b. Super silt fence with wire strung between the support poles (minimum 4 feet high) with high visibility flagging.
   c. 14 gauge 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.

6. The Permittee and contractor shall maintain the temporary tree protection devices for the duration of the project and the location must not be altered without prior approval of the Forestry Inspector. No equipment, trucks, materials, debris, or any other items may be stored within the tree protection fence areas during the entire construction project. No access beyond the fenced area will be permitted. Tree Protection fencing shall not be removed without prior approval of the Forestry Inspector.

7. Long term tree protection devices/techniques, as shown on the FCP or as directed by the Forestry Inspector may include but are not limited to:
   a. Root aeration systems
   b. Retaining walls
   c. Raised sidewalks
   d. Tunneling of utilities
   e. Pier and panel walls
   f. Porous pavers

DURING CONSTRUCTION

1. Periodic inspections at the discretion of the Forestry Inspector will occur during the construction project. Corrections and repairs to all tree protection devices and other protective measures, as determined by the Forestry Inspector, must be made within the timeframe established by the Forestry Inspector.
2. The Permittee must immediately notify the Forestry Inspector of any damage to trees, forests, understory, ground cover, and any other undisturbed areas shown on the plan. Remedial actions to the restore these areas will be determined by the Forestry Inspector and the corrective actions must be made within the timeframe established by the Forestry Inspector.
3. Failure to comply with the approved FCP or any directive of the City Forester's office is a violation of the Forest and Tree Preservation Ordinance (FTPO). Pursuant to Section 10.5-34 of the FTPO, a fine in the amount of $1,000 may be imposed for each violation. Each day a violation continues is a separate violation. In addition, a stop work order may be issued until the violation has been abated and the fine has been paid or an appeal has been filed pursuant to Section 10.5-35 of the FTPO. Additional punitive measures as stated under Section 10.5-34 of the FTPO may be imposed.

POST CONSTRUCTION

1. After construction is completed, the Permittee must request a final inspection in writing with the Forestry Inspector. At the final inspection, the Forestry Inspector may require additional corrective measures, which may include, but is not limited to:
   a. Removal and replacement of dead and dying trees
   b. Pruning of damaged, dead or declining limbs
   c. Surface mulching
   d. Soil aeration
   e. Fertilization
   f. Watering
   g. Wound repair
   h. Clean up of retention areas including trash removal
2. After the final inspection and completion of all corrective measures the Forestry Inspector will request all temporary tree and forest protection devices be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both the City Sediment Control Inspector and the Forest Conservation Inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.

INSTALLATION OF PLANT MATERIAL

1. The Permittee is responsible for obtaining the approved Forest Conservation Plan/Landscape Plan and providing a copy to the Landscape Contractor. The Permittee shall ensure that the Landscape Contractor can secure the plants shown the FCP/Landscape Plan. Plant substitutions are not allowed. It is strongly recommended that plant material be secured from supplier by the project start date.

2. A pre-planting meeting is required before installation of landscaping, afforestation, or reforestation. The applicant must schedule an on-site pre-planting meeting with the City Forestry Inspector. Attendees must include the Permittee, landscape contractor, and Forestry Inspector. Trees and shrubs shall conform to the current edition of the American Standard for Nursery Stock (ANSI Z60.1).

3. Comply with appropriate City Soil Specification:
   I. Soil Specification FOR TREE PLANTING WHERE EXISTING PAVEMENT OR OTHER IMPERVIOUS SURFACES WERE PREVIOUSLY LOCATED OR WHERE EXISTING GREENSPACE HAS BEEN SEVERELY DEGRADED[1]
      1. Site preparation
         a. Demolish existing impervious surface and remove all existing asphalt, concrete, stone and construction materials to expose subsoil free of debris.
         b. Excavate so that final planting bed will provide quality soil to a depth of forty-eight (48) inches, and to a radius of 10' minimum or to new hard edge of planting bed, whichever is less.
         c. Loosen exposed subsoil below 48" by ripping 18" into the sub grade elevation.
         d. Test to ensure that planting bed drains at a rate of at least 1 inch/per hour.
         e. Install imported soil to fill excavated planting bed. Imported soil shall have a texture of LOAM, per the USDA soil classification system and a chemical composition compatible with healthy tree growth. When installing the soil, it should be installed in lifts or layers of < 12 inches (30 cm), tamping or watering (not both) between lifts to minimize potential settling.
      2. Immediately prior to installation of plant material, the soil must be tested and must have a pH range between 5.5 and 7 and a nutrient content which corresponds to an adequate rating, per current industry standards. Amend soil, if necessary, to achieve the current industry standard.
      3. The Forestry Inspector may require additional soil specifications, based on site conditions.
   II. Soil Specification FOR PLANTING WHERE EXISTING GREEN SPACE HAS NOT BEEN PROTECTED FROM CONSTRUCTION IMPACTS BUT IS NOT SEVERELY DEGRADED.
      1. Site Preparation:
         a. Remove all construction debris and top four to six inches of existing soil.
         b. Test remaining existing soil to verify a pH range between 5.5 and 7, and has a nutrient content which corresponds to an adequate rating, per current industry standards.
         c. Apply four (4) inches of mature compost evenly over the entire planting surface. (4" = 12 Cubic Yard/1,000 s.f.). Provide compost supplier information and specifications to the City Forestry Inspector for approval prior to install
         d. Till the compost into the existing soil to a minimum depth of thirty-six (36) inches using the city's soil profile rebuilding specification.
         e. If soil does not meet nutrient standards, mitigate soil chemistry to meet the chemical parameters.
      2. The Forestry Inspector may require additional soil specifications, based on site conditions.
   III. Soil Specification FOR PLANTING WITHIN EXISTING GREEN SPACE AREAS WHICH HAVE BEEN PROTECTED FROM CONSTRUCTION IMPACTS (One of two options, as determined by Forestry Inspector) Refer to approved City of Rockville Detail A-7
      1. Test existing soil to verify it has a pH range between 5.5 and 7, and a nutrient content which corresponds to an adequate rating, per current industry standards. If soil does not meet nutrient standards, one of two options will be performed to mitigate the soil:
         a. Option 1- Till Method- Depth of tilling for planting must be at least twenty-four (24) inches:
            i. Apply four (4) inches of mature compost evenly over the entire planting surface (4" = 12 cubic yards/1,000 s.f.). Provide compost supplier information and specifications to the City Forestry Inspector for approval prior to install.
            ii. Till the compost into the existing soil to a minimum depth of twenty-four (24") inches.
         b. Option 2 – Aeration and Vertical Mulching
            i. Using a 2-3" Auger, drill a series of holes in the soil to a depth of twenty-four (24) inches.
            ii. Begin at the edge of the hole dug for the root ball and continue drilling at one-foot intervals (maximum), in concentric rings around the tree out to ten (10) feet from the tree.
            iii. Each hole must be refilled with mature compost.
         c. The Forestry Inspector may require additional soil specifications, based on site conditions.

[1] See definitions section #9

   IV. Soil testing of the existing soil may be conducted with PRIOR approval from the City's Forestry Inspector to determine the number and location of the samples. The above requirements may be reduced if soil testing shows the following:
      1. Soil pH is between 5.5 and 7
      2. The top 24" of existing soil contains a minimum of 4-6% organic matter by weight
      3. The soil is free of contaminants
      4. The soil texture is sandy loam or loam
      5. The soil has an infiltration rate not less than 1" per hour
      6. The soil does not contain debris or stones greater than one inch
      7. The soluble salt content is less than 3 dS/m
      8. Consult the University of Maryland Extension website: http://extension.umd.edu/ for a listing of commercial soil testing facilities.
   V. Soil preparation is required for street trees planted within the city's rights-of-way and private street trees, if they are part of the approved plan.

4. The depths and grades shown on plan drawings are final grades after settlement and shrinkage of the organic material. The contractor shall install the soil mix at a higher level to anticipate this reduction of volume. All grades are assumed to be 'as measured" to be prior to the addition of any surface compost till layer or mulch or sod.

5. All details of the planting plans regarding plant quality and proper planting will be discussed including but not limited to:
   a. Plant quality.
   b. Proper form for species.
   c. Proper ratio of caliper size/height to container size/root ball size.
   d. Proper pruning cuts if applicable in accordance with current ANSI A300 pruning standards (generally there should be no recent pruning).
   e. No co-dominant stems or multiple trunks (unless approved by FCP or by The Forestry Inspector).
   f. Sound graft union.
   g. Free of girdling roots, or the ability to remove girdling roots without damaging the tree.
   h. Trees shall be healthy, vigorous, insect/disease free, and without cankers/cracks or trunk damage.

6. Proper Installation
   a. Root flare no higher than 3 inches from existing grade.
   b. Exposed root flare (not graft); removing more than several inches of soil to expose the root flare may result in the rejection of the plant material.
   c. Wire baskets/twine/burlap removed from at least the top half of root ball, or as directed by Forestry Inspector.
   d. All burlap or twine removed completely.
   e. No hose and wire; staking and strapping per City planting detail.
   f. Planting Hole a minimum of twice the width of the root ball; could be greater. Planting detail assumes soil has been prepared per the city's specifications (Planting, #3).
   g. Mulched properly, per City planting detail.
   h. Wildlife protection installed, if required; type approved by the Forestry Inspector.

7. Trees not complying with the above requirements may be rejected at the discretion of the City Forestry Inspector.

8. Tree planting will generally not be permitted between the dates of June 1 and September 1, or when the ground is frozen.

9. DEFINITIONS
   a. Topsoil
      i. Soil can be considered topsoil if it originates from an A horizon of a natural soil or is a mineral soil with 4-6%% organic matter content, and a NRCS textural class similar to pre-development conditions A horizon soils for the site, or as specified by the City Forestry Division. The city Forestry Division will specify a LOAM texture in the absence of native conditions listed above. Blended soils shall not be used unless specified by the City Forestry Division. In addition, topsoil shall:
         1. Be friable and well drained
         2. Have a pH between 5.5-7.

         3. Have an organic matter content between 4-6%.
         4. Have low salinity as indicated by a soluble salt content which is less than 3 dS/m
         5. Be free of debris, stone, gravel, trash, large sticks, heavy metals, and other deleterious contaminants, (if screening is used to remove debris, screen size must be ¾ inch or larger).
         6. Have a nutrient profile such that it has an adequate rating, per current industry standards.
         7. Be free of noxious weed seeds
   b. Compost
      i. Compost shall be composed of leaves, yard waste, or food waste. Biosolid-based composts shall not be used. A compost sample with analysis shall be submitted for approval to the City Forestry Division before application.
      ii. Stability refers to the rate of biological breakdown, measured by carbon dioxide release. Maturity refers to completeness of the aerobic composting process and suitability (lack of plant toxicity) as a plant growth media, often measured by ammonia release and by plant growth tests. Compost manufacturers that subscribe to the US Composting Council's testing program may document stability as compost testing 7 or below in accordance with TMECC 05.08-B, "Carbon Dioxide Evolution Rate". Maturity (suitability for plant growth) may be documented as compost testing greater than 80% in accordance with TMECC 05.05-A, "Germination and Vigor". Compost is considered mature and stable if it tests at 6.0 or higher on the Solvita Compost Maturity Index Rating, which is a combination of Carbon Dioxide and Ammonia Maturity Tests (test information and equipment available at www.solvita.com).
      iii. Compost shall also be:
         1. Free of weed seeds.
         2. Free of heavy metals or other deleterious contaminants.
         3. Have a soluble salt content which is less than 3 dS/m.
   c. Severely Degraded Soil
      i. Soil shall be considered severely degraded if grade was lowered or raised more than 14 inches OR soil was compacted in lifts regardless of the final grade OR was used as a staging area for construction materials, equipment or processes.
      ii.

POST INSTALLATION

1. The Permittee shall notify the City Forestry Inspector IN WRITING when the planting is complete and request a post planting inspection. The inspection must include the Permittee, landscape contractor and Forestry Inspector. The maintenance and warranty period will not begin until the City Forestry Inspector has accepted ALL plantings.

2. Trees will be inspected for plant quality and proper planting in accordance with City specifications and nursery standards. Once the maintenance period has begun, the applicant is responsible for maintaining plant health in accordance with the signed Warranty and Maintenance Agreement.

3. Routine inspections will be conducted throughout the warranty period and the applicant will be notified in writing when corrective measures are required. Failure to complete the corrective measures by the given date may result in fines being issued, permits revoked, extension of warranty period or other punitive measures.

4. Such maintenance shall include when appropriate, but not necessarily be limited to:
   a. Weekly watering equal to 10 gallons per caliper measure of tree diameter. (ex: 2.5" caliper tree =25 gallons/week.) Documented drenching natural rainfall may substitute for weekly watering.
   b. Control of competing vegetation throughout the maintenance period as necessary.
   c. Fertilizing, as required by soil analysis.
   d. Pruning, mulching, tightening of strapping, resetting of plants to proper grades or upright position.
   e. Furnishing and applying pesticides or other items necessary to thwart damage from insects and disease.
   f. Providing protection measures such as fencing and interpretive signs as necessary, to prevent destruction or degradation of the planting site.
   g. Replacement of dead and dying trees. Survival standards contained in the State Forest Conservation Manual shall be followed for the protection and satisfactory establishment of forest where applicable.

   h. Eradicate, suppress and control non-native and invasive plant species during the maintenance period to the satisfaction of the City Forestry Inspector.
   i. Installing and maintaining devices to protect against wildlife damage.
   j. Removal of staking and strapping after six months, or as directed by the Forestry Inspector.

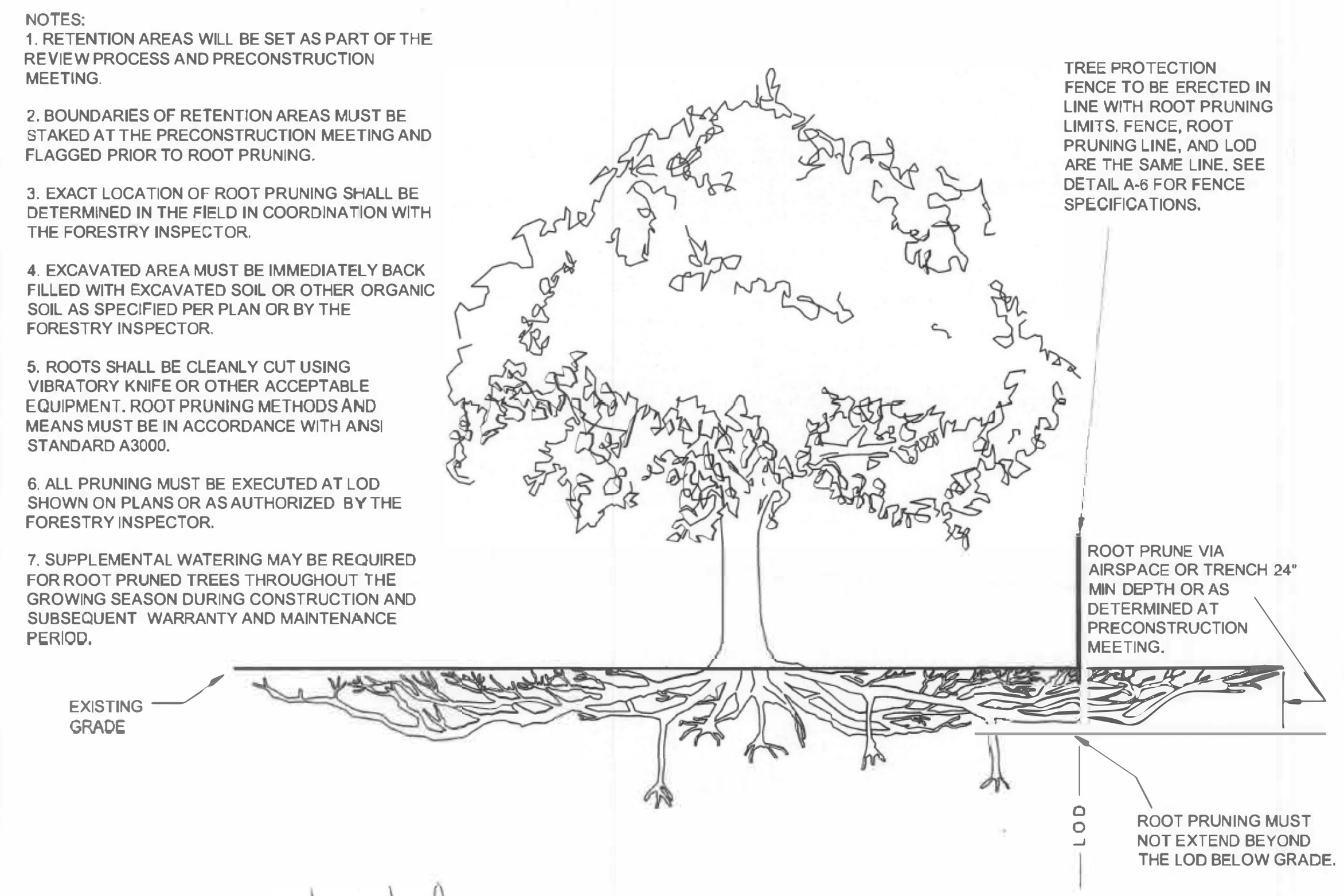
NON-NATIVE INVASIVE PLANT CONTROL:

1. The City of Rockville maintains a list of non-native and invasive plants for certain available on the City's website. The State of Maryland maintains a noxious weed list. The Permittee shall submit a Non-Native and Invasive Management Plan to the City Forestry Inspector for review and approval prior to the pre-planting meeting. Details to be included in the management plan are:
   a. Narrative and/or plan stating the location, type and amount of non-native and invasive plants present on the site.
   b. Proposed treatment measures and methods of control by plant type.
   c. Timing and frequency of treatments by plant type.
   d. Plan for seeding and/or re-planting following management/eradication treatment.
   e. Proposed signage type and locations for installing herbicide application notification signs.
   f. Copies of contractor certifications/pesticide licenses.

2. Contractor is responsible for complying with MDE, EPA and other government agency regulations as well as obtaining proper permits from these agencies as applicable. The Forestry inspector must be notified 48 hours in advance prior to commencing any and all treatments.

3. The Forestry Inspector will perform periodic inspections of the non-native and invasive treatments throughout the warranty and maintenance period. The applicant may be required to submit proof of treatment.

NOTES:
1. RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRECONSTRUCTION MEETING.
2. BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRECONSTRUCTION MEETING AND FLAGGED PRIOR TO ROOT PRUNING.
3. EXACT LOCATION OF ROOT PRUNING SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FORESTRY INSPECTOR.
4. EXCAVATED AREA MUST BE IMMEDIATELY BACK FILLED WITH EXCAVATED SOIL OR OTHER ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FORESTRY INSPECTOR.
5. ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT. ROOT PRUNING METHODS AND MEANS MUST BE IN ACCORDANCE WITH ANSI STANDARD A3000.
6. ALL PRUNING MUST BE EXECUTED AT LOD SHOWN ON PLANS OR AS AUTHORIZED BY THE FORESTRY INSPECTOR.
7. SUPPLEMENTAL WATERING MAY BE REQUIRED FOR ROOT PRUNED TREES THROUGHOUT THE GROWING SEASON DURING CONSTRUCTION AND SUBSEQUENT WARRANTY AND MAINTENANCE PERIOD.



APPROVED BY: CITY FORESTER
DATE: 3/30/17

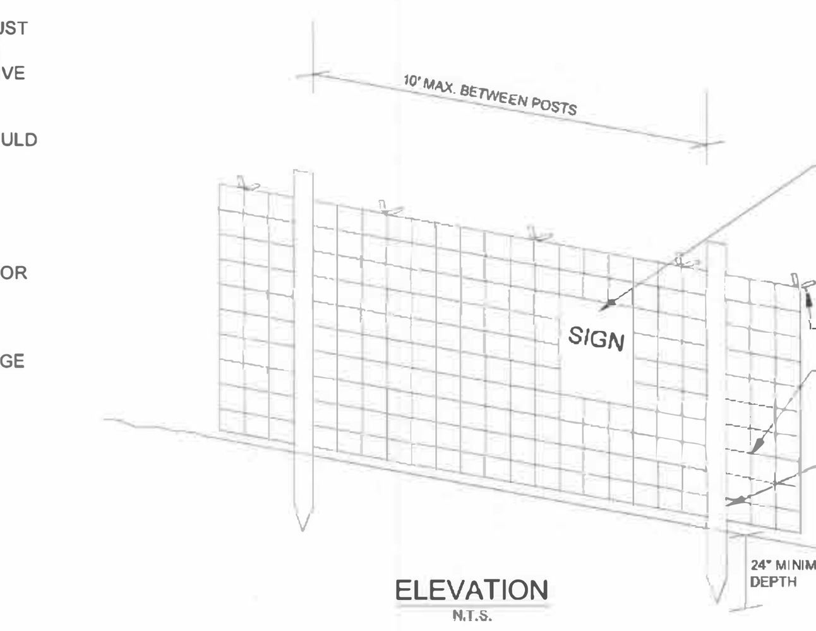
ROOT PRUNING DETAIL — DETAIL A-3

NOTES:
1. PRACTICE MAY BE COMBINED WITH SEDIMENT CONTROL FENCING, PER DIRECTION OF FORESTRY STAFF.
2. LOCATION AND LIMITS OF FENCING SHALL BE COORDINATED IN THE FIELD WITH FORESTRY STAFF.
3. BOUNDARIES OF PROTECTION AREA MUST BE STAKED PRIOR TO INSTALLING PROTECTIVE DEVICE.
4. ROOT DAMAGE SHOULD BE AVOIDED. ROOT PRUNING TO OCCUR PRIOR TO OR IN CONJUNCTION WITH INSTALLATION, AS SHOWN ON FCP PLAN OR PER DIRECTION OF FORESTRY STAFF.
5. PROTECTIVE SIGNAGE IS REQUIRED.
6. FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. REMOVAL WITH APPROVAL BY CITY FORESTRY STAFF.

STANDARD SYMBOL
—TPF—TPF—

TREE PROTECTION AREA
NO DISTURBANCE OR ACCESS PERMITTED BEYOND THIS POINT VIOLATIONS ENFORCED PER CITY CODE CHAPTER 10.5

AREA DE PROTECCION DE ARBOLES
NINGUN DISTURBIO O ACCESO PERMITIDO MAS ALLA DE ESTA PUNTO VIOLACIONES FORZADAS POR CODIGO CAPITULO 10.5



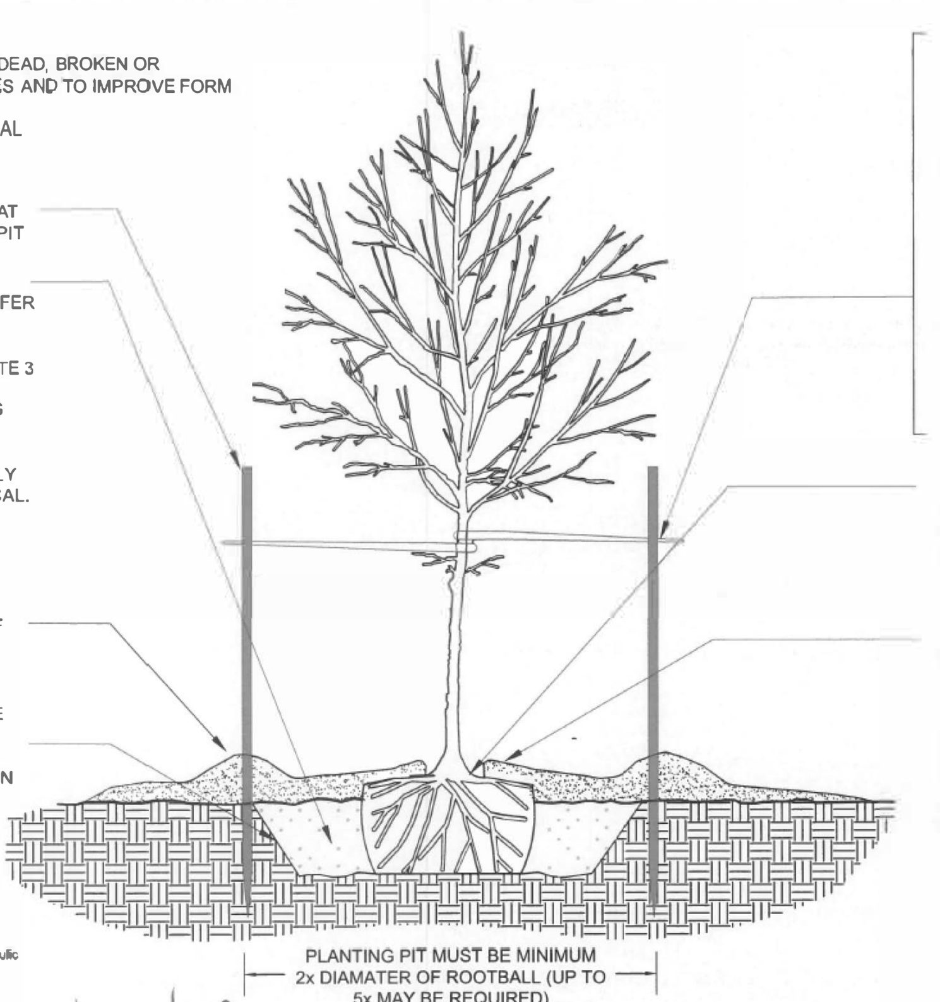
ELEVATION
N.T.S.

APPROVED BY: CITY FORESTER
DATE: 3/30/17

TREE PROTECTION FENCE DETAIL — DETAIL A-6

NOTES:
PRUNE TO REMOVE DEAD, BROKEN OR CROSSING BRANCHES AND TO IMPROVE FORM

STAKES ARE OPTIONAL



NOTE: coordinate planting in pulic right-of with the Public Works Inspector and the City Forester

APPROVED BY: CITY FORESTER
DATE: 3/30/17

SHADE TREE PLANTING DETAIL — DETAIL A-1

SOLTESZ, INC.
ROCKVILLE OFFICE
2 Research Place, Suite 100
Rockville, MD 20850
P. 301.948.2750 F. 301.948.9067
www.solteszco.com

Engineering
Surveying
Planning
Environmental Sciences

NO.	REVISIONS	BY	DATE

MISS UTILITY NOTE

INFORMATION CONCERNING EXISTING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES AND UTILITY CROSSINGS BY DIGGING TEST PITS BY HAND, WELL IN ADVANCE OF THE START OF EXCAVATION. CONTACT "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE ENGINEER AND THE UTILITY COMPANY BEFORE PROCEEDING WITH CONSTRUCTION. CLEARANCES LESS THAN NOTED MAY REQUIRE REVISIONS TO THIS PLAN.

OWNER / DEVELOPER / APPLICANT

TWINARD LIMITED PARTNERSHIP
C/O UNIWEST DEVELOPMENT LLC
8191 STRAWBERRY LANE, SUITE 3
FALLS CHURCH, VA 22042-1032
(703) 698-4042

MICHAEL D. COLLIER

STATE OF MARYLAND — DANIEL H. PARK — 3894 — LANDSCAPE ARCHITECT

NOTES AND DETAILS

FOREST CONSERVATION PLAN
TWINBROOK PLACE
12501 ARDENNES AVE
LOT 5, BLOCK E
CITY OF ROCKVILLE (4TH) ELECTION DISTRICT, MONTGOMERY COUNTY, MARYLAND

TAX MAP	ZONING CATEGORY:
GQ63	MXE
WSSC 200' SHEET: 216NW06	SITE DATUM HORIZONTAL: ____ VERTICAL: ____
ONE INCH 1" = N/A	DATE: 8/25/2023; DESIGNED: NC; TECHNICIAN: NC; CHECKED: DHP; CAD STD'S. VERSION: CONNECT / NCS
SHEET FCP-3	
PROJECT NO. 1047-01-00	

Community Planning & Development Services
Received
September 6, 2023

P:\10470100\Engineer\Sheet_Files\ForestConservationPrelim_Sheet.dgn Scale= 0.08333317 ' / in. User= JSchwartz PLTdrv= PDF_Grey_150.pltcfg Pentbl= TEXT_SUB.tbl 8/25/2023 2:50:24 PM

GENERAL NOTES:

1. TOTAL TRACT AREA: 2.09 ACRES
2. TOTAL EXISTING FOREST: 0 ACRES
3. EXISTING 100-YEAR FLOODPLAIN: 0 ACRES
4. CURRENT ZONING: MIXED-USE EMPLOYMENT
5. WATERSHED: ROCK CREEK
6. THE PROPERTY IS NOT LOCATED WITHIN A MAPPED 100-YEAR FLOODPLAIN PER FEMA DIGITAL FLOOD INSURANCE RATE MAP, PANEL 24031C0353D
7. NO STREAMS ARE LOCATED ON OR WITHIN 100 FEET OF THIS PROPERTY
8. NO WETLANDS OR OTHER WATERS OF THE U.S. FEATURES ARE LOCATED ON OR WITHIN 50 FEET OF THIS PROPERTY.
9. NO RARE, THREATENED, OR ENDANGERED SPECIES WERE OBSERVED ON THE PROPERTY DURING THE SITE INVESTIGATION. A REQUEST TO THE MARYLAND DEPARTMENT OF NATURAL RESOURCES - WILDLIFE AND HERITAGE SERVICE WAS RETURNED WITH A RESPONSE OF NO FINDINGS, DATED JUNE 28, 2023.
10. DBH MEASURED WITH A FORESTER'S DBH TAPE AT 4.5 FT ABOVE GRADE UNLESS OTHERWISE NOTED.
11. NO STATE OR COUNTY CHAMPION TREES ARE LOCATED ON OR ADJACENT TO THE SITE.
12. THIS PROPERTY IS NOT IDENTIFIED IN A HISTORIC DISTRICT AND IS NOT A BUILDING OR STRUCTURE OF HISTORIC SIGNIFICANCE IN THE ROCKVILLE LOCALLY-DESIGNATED HISTORIC DISTRICTS DATABASE, ACCESSED 07/25/2023.
13. FIELD WORK PERFORMED BY LUIS YAÑEZ (ISA CERTIFIED ARBORIST PN-8778A, TRAQ) OF WETLAND STUDIES AND SOLUTIONS, INC. (WSSI) ON MAY 11, 2023.
14. SOILS DATA FROM DIGITAL DATA, U.S. DEPARTMENT OF AGRICULTURE.
15. NO NON-NATIVE INVASIVE SPECIES WERE NOTED ONSITE.
16. LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE, SOURCE INFORMATION FROM PLANS AND MARKINGS HAS BEEN COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THOSE UNDERGROUND UTILITIES.

MAPPED SOIL TYPES

Map Unit	*Soil Description*	*Hydrologic Soil Group*	*K-factor (whole soil)*	*Hydric Inclusion %*	*High Erodibility (Y/N)*
400	Urban-land	D	N/A	0	N

Source: http://websoilsurvey.com Accessed 7/25/2023

Soil type applies to entire display area.

As of 10/23/2023, the NRI/FSD is under review. Please note that the Site Plan cannot be approved until an NRI/FSD is approved.

VICINITY MAP

LEGEND

- EXISTING NON-SIGNIFICANT TREE WITH CRITICAL ROOT ZONE (CRZ) & STRUCTURAL ROOT ZONE (SRZ)
- EXISTING SPECIMEN TREE (≥ 30 IN.)
- EXISTING SIGNIFICANT TREE (≥12 IN. AND ≤ 29 IN.)
- EXISTING TREE ≤ 6 IN.
- PROPERTY LINE
- MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- FOREST CONSERVATION EASEMENT

Community Planning & Development Services
Received
September 6, 2023

QUALIFIED PROFESSIONAL CERTIFICATION

THIS PLAN COMPLIES WITH THE CURRENT REQUIREMENTS OF CITY OF ROCKVILLE'S CODE AND THE ENVIRONMENTAL STANDARI

SIGNED: _____ DATE:07/25/2023

LUIS YANEZ
WETLAND STUDIES AND SOLUTIONS, INC.
1131 BENFIELD BOULEVARD, SUITE L
MILLERSVILLE, MD 21108
PH: (703) 679-5791 FAX: (410) 672-5993
E-MAIL: LYANEZ@WETLANDS.COM

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Wetland Studies and Solutions, Inc.
a DAVEY company
1131 Benfield Boulevard • Suite L
Millersville, Maryland 21108
Phone: 410-672-5990 • Fax: 410-672-5993
www.wetlands.com

Simplified Natural Resources Inventory/ Forest Stand Delineation (NRI/FSD) Plan

12501 Ardennes Ave

City of Rockville, MD

INTERNATIONAL SOCIETY OF ARBORICULTURE
LUIS YANEZ
ISA# PN-8778A
CERTIFIED ARBORIST

REVISIONS				
No.	Date	Description	Rev. By	App. By

SCALE:As Noted C.I.:---

DATE: 7/28/2023

Horizontal Datum: MD NAD 83

Vertical Datum: NAD 88

Boundary and Topo Source: Engineer

Design	Draft	Approved
LY	LY	MK

Sheet #
1

WSSI Project Number:
MD2228.01

Tree #	DBH (Diameter at 4.5 feet above grade)	Common Name	Botanical Name	HEALTH	STRUCTURE	FORM	Condition Rating %	Condition Rating	Regulated Status	Number of Stems	SRZ Structural Critical Root Zone (radius) in Feet	CRZ Critical Root Zone Radius in Ft (1.5 ft radius/in DBH)	Condition Notes
242	6	oak, northern red	*Quercus rubra*	70%	65%	65%	65%	Good		1	3	9	Full Crown, Buried Root Collar
243	10	oak, northern red	*Quercus rubra*	70%	65%	65%	65%	Good		1	5	15	Full Crown, Small Dead Wood (1-2")
244	10	oak, northern red	*Quercus rubra*	60%	65%	65%	60%	Fair		1	5	15	Full Crown, Stressed, chlorotic problem
245	9	maple, red	*Acer rubrum*	70%	65%	65%	65%	Good		1	4	14	Surface Roots, Girdling Roots, Root Damage/Decay
246	10	oak, northern red	*Quercus rubra*	70%	65%	65%	65%	Good		1	5	15	One Sided
247	7	redbud, eastern	*Cercis canadensis*	65%	65%	65%	65%	Good		1	3	11	One Sided, Buried Root Collar, Small Dead Wood (1-2")
248	36	tuliptree	*Liriodendron tulipifera*	65%	60%	60%	60%	Fair	Specimen	1	16	54	Surface Roots, Girdling Roots, Hardware
249	7	maple, red	*Acer rubrum*	70%	65%	65%	65%	Good		1	3	11	Suppressed, Surface Roots
250	8	tuliptree	*Liriodendron tulipifera*	70%	70%	70%	70%	Good		1	4	12	Full Crown
251	8	cherry, sweet	*Prunus avium*	70%	65%	65%	65%	Good		1	4	12	Surface Roots
252	20	maple, red	*Acer rubrum*	70%	60%	60%	60%	Fair	Significant	1	9	30	Surface Roots, Girdling Roots
253	12	oak, northern red	*Quercus rubra*	60%	65%	65%	60%	Fair	Significant	1	5	18	Large Dead Wood (3"+), Small Dead Wood (1-2"), Low Vigor
254	11	tuliptree	*Liriodendron tulipifera*	70%	65%	60%	60%	Fair		1	5	17	Small Dead Wood (1-2")
255	13	maple, red	*Acer rubrum*	70%	65%	70%	65%	Good	Significant	1	6	20	
256	8	blackgum	*Nyssa sylvatica*	70%	70%	65%	65%	Good		1	4	12	Buried Root Collar, Small Dead Wood (1-2")
257	8	oak, northern red	*Quercus rubra*	70%	60%	55%	55%	Fair		1	4	12	
258	11	cherry, sweet	*Prunus avium*	70%	60%	65%	60%	Fair		1	5	17	Broken Limbs
259	7	maple, red	*Acer rubrum*	70%	70%	65%	65%	Good		1	3	11	Surface Roots
260	9	cherry, sweet	*Prunus avium*	70%	70%	70%	70%	Good		1	4	14	
261	20	pine, eastern white	*Pinus strobus*	65%	60%	60%	60%	Fair	Significant	1	9	30	
262	10	maple, red	*Acer rubrum*	70%	65%	65%	65%	Good		1	5	15	Surface Roots, Vines
263	9	cherry, sweet	*Prunus avium*	65%	65%	60%	60%	Fair		1	4	14	Surface Roots, Small Dead Wood (1-2")
264	13	oak, white	*Quercus alba*	65%	65%	60%	60%	Fair	Significant	1	6	20	Root Damage/Decay, Small Dead Wood (1-2")
265	6	tuliptree	*Liriodendron tulipifera*	70%	60%	60%	60%	Fair		1	3	9	Suppressed, Buried Root Collar
266	20	maple, red	*Acer rubrum*	60%	65%	65%	60%	Fair	Significant	1	9	30	Surface Roots, Root Damage/Decay, Small Dead Wood (1-2")
267	35	tuliptree	*Liriodendron tulipifera*	70%	65%	65%	65%	Good	Specimen	1	16	53	Small Dead Wood (1-2"), old tag 574
268	17	tuliptree	*Liriodendron tulipifera*	65%	65%	65%	65%	Good	Significant	1	8	26	Surface Roots, Root Damage/Decay, Small Dead Wood (1-2")
269	26	tuliptree	*Liriodendron tulipifera*	70%	65%	65%	65%	Good	Significant	1	12	39	Old tag 751
270	8	redbud, eastern	*Cercis canadensis*	65%	60%	65%	60%	Fair		1	4	12	One Sided, Suppressed, Co-Dominant Stems, Small Dead Wood (1-2"), DBH at 3'
271	8	oak, northern red	*Quercus rubra*	60%	60%	60%	60%	Fair		1	4	12	Suppressed, Small Dead Wood (1-2")
272	7	redbud, eastern	*Cercis canadensis*	50%	60%	60%	50%	Fair		1	3	11	Surface Roots, Girdling Roots, Low Vigor
273	10	maple, red	*Acer rubrum*	65%	65%	65%	65%	Good		1	5	15	Surface Roots
274	13	cherry, sweet	*Prunus avium*	65%	65%	65%	65%	Good	Significant	1	6	20	Surface Roots, Small Dead Wood (1-2")
275	9	maple, red	*Acer rubrum*	65%	65%	65%	65%	Good		1	4	14	
276	10	elm, American	*Ulmus americana*	70%	60%	65%	60%	Fair		1	5	15	Suppressed, Surface Roots, Co-Dominant Stems
277	10	oak, northern red	*Quercus rubra*	60%	65%	65%	60%	Fair		1	5	15	Small Dead Wood (1-2")
278	6	lilac, Japanese tree	*Syringa reticulata*	65%	65%	65%	65%	Good		1	3	9	Buried Root Collar
279	6	lilac, Japanese tree	*Syringa reticulata*	65%	65%	65%	65%	Good		1	3	9	Buried Root Collar
280	6	lilac, Japanese tree	*Syringa reticulata*	65%	65%	65%	65%	Good		1	3	9	Buried Root Collar, DBH at 3.5'
281	6	lilac, Japanese tree	*Syringa reticulata*	65%	65%	65%	65%	Good		1	3	9	Buried Root Collar, DBH AT 4'
282	7	lilac, Japanese tree	*Syringa reticulata*	65%	65%	65%	65%	Good		1	3	11	Buried Root Collar, Broken Limbs
283	6	lilac, Japanese tree	*Syringa reticulata*	65%	65%	65%	65%	Good		1	3	9	Buried Root Collar, Small Dead Wood (1-2")
284	7	lilac, Japanese tree	*Syringa reticulata*	65%	65%	65%	65%	Good		1	3	11	Buried Root Collar, Small Dead Wood (1-2")
285	6	lilac, Japanese tree	*Syringa reticulata*	65%	65%	65%	65%	Good		1	3	9	Buried Root Collar, Small Dead Wood (1-2")
286	9	crapemyrtle, common	*Lagerstroemia indica*	65%	65%	65%	65%	Good		1	4	14	Co-Dominant Stems, DBH at base
287	9	crapemyrtle, common	*Lagerstroemia indica*	65%	65%	65%	65%	Good		1	4	14	Co-Dominant Stems, DBH at base
288	11	crapemyrtle, common	*Lagerstroemia indica*	65%	65%	65%	65%	Good		1	5	17	Co-Dominant Stems, DBH at base
289	10	cherry/plum spp.	*Prunus spp.*	65%	50%	65%	50%	Fair		1	5	15	Co-Dominant Stems, DBH at 3'
290	10	cherry/plum spp.	*Prunus spp.*	65%	60%	65%	60%	Fair		1	5	15	Co-Dominant Stems, Small Dead Wood (1-2"), Stressed, DBH at 3'
291	9	cherry/plum spp.	*Prunus spp.*	65%	60%	65%	60%	Fair		1	4	14	Girdling Roots, Co-Dominant Stems, DBH at 3'
292	13	cypress, Leyland	*x Cupressocyparis leylandii*	70%	65%	65%	65%	Good	Significant	1	6	20	Broken Limbs
293	12	cypress, Leyland	*x Cupressocyparis leylandii*	65%	60%	65%	60%	Fair	Significant	1	5	18	Suppressed, Buried Root Collar, Broken Limbs
294	13	cypress, Leyland	*x Cupressocyparis leylandii*	65%	60%	65%	60%	Fair	Significant	1	6	20	Suppressed, Buried Root Collar, Broken Limbs
295	12	cypress, Leyland	*x Cupressocyparis leylandii*	65%	60%	60%	60%	Fair	Significant	1	5	18	Suppressed, Excessive Lean, Buried Root Collar, Broken Limbs
296	14	cypress, Leyland	*x Cupressocyparis leylandii*	65%	60%	60%	60%	Fair	Significant	1	6	21	Suppressed, Buried Root Collar, Mechanical Damage, Broken Limbs
297	12	cypress, Leyland	*x Cupressocyparis leylandii*	65%	60%	60%	60%	Fair	Significant	1	5	18	Buried Root Collar, Broken Limbs
298	12	cypress, Leyland	*x Cupressocyparis leylandii*	65%	60%	60%	60%	Fair	Significant	1	5	18	Buried Root Collar, Broken Limbs
299	7	cypress, Leyland	*x Cupressocyparis leylandii*	65%	60%	60%	60%	Fair		1	3	11	Suppressed, Buried Root Collar, Broken Limbs
86	9	oak, swamp white	*Quercus bicolor*	65%	65%	65%	65%	Good		1	4	14	One Sided
87	9	oak, swamp white	*Quercus bicolor*	65%	65%	65%	65%	Good		1	4	14	Narrow Crown
88	10	oak, swamp white	*Quercus bicolor*	65%	65%	65%	65%	Good		1	5	15	Narrow Crown, Co-Dominant Stems
89	10	oak, swamp white	*Quercus bicolor*	65%	65%	65%	65%	Good		1	5	15	Narrow Crown, Co-Dominant Stems
90	7	oak, swamp white	*Quercus bicolor*	65%	65%	65%	65%	Good		1	3	11	Narrow Crown, Co-Dominant Stems
91	6,4,3	locust, black	*Robinia pseudoacacia*	65%	60%	65%	60%	Fair		3	4	12	Suppressed, Co-Dominant Stems

Offsite trees

Tree #	DBH (Diameter at 4.5 feet above grade)	Common Name	Botanical Name	HEALTH	STRUCTURE	FORM	Condition Rating %	Condition Rating	Regulated Status	Number of Stems	SRZ Structural Critical Root Zone (radius) in Feet	CRZ Critical Root Zone Radius in Ft (1.5 ft radius/in DBH)	Condition Notes
300	12,12, 4,4	boxelder	*Acer negundo*	55%	45%	50%	45%	Fair	Significant	4	8	27	Offsite, Co-Dominant Stems, Small Deadwood (1-2"), Broken Limbs
85	9,9	cherry, black	*Prunus serotina*	65%	60%	65%	60%	Fair	Significant	2	6	19	Offsite, Co-Dominant Stems, Small Dead Wood (1-2"), Vines

RESOURCE DATA TABLE (INFORMATION TO BE SHOWN IS SQUARE FEET)	TOTAL AREA	IMPACTED AREA	NOT IMPACTED	AFFORESTATION OR REFORESTATION	CLEARED FOREST
PRIORITY FOREST	0				
NON-PRIOIRTY FOREST	0				
FORESTED WETLAND	0				
NON-FORESTED WETLAND	0				
FORESTED FLOODPLAIN	0				
NON-FORESTED FLOODPLAIN	0				
FORESTED STREAM VALLEY BUFFER	0				
NON-FORESTED STREAM VALLEY	0				

NRI/FSD TABULATION TABLE	
ACREAGE OF TRACT:	2.09
ACREAGE OF EX. FOREST:	0
ACREAGE OF EXISTING WETLANDS:	0
ACREAGE OF FORESTED WETLANDS:	0
ACREAGE OF WETLAND BUFFERS:	0
ACREAGE OF STREAM BUFFERS:	0
ACREAGE OF FORESTED STREAM BUFFER:	0
ACREAGE OF 100 YEAR FLOODPLAIN:	0
LINEAR EXTENT OF STREAMS:	0
AVERAGE WIDTH OF STREAM BUFFER:	0

MINIMUM TREE COVER			
TRACT AREA SF	ZONING	MTC REQURED %	MTC SF REQUIRED
91226.9	MXE	15	13684.035

GENERAL NOTE:

TREE ASSESSMENT CONDUCTED ACCORDING TO THE GUIDELINES PRESENTED IN "THE GUIDE FOR PLANT APPRAISAL, 10TH ED., REVISED" BY THE COUNCIL OF TREE AND LANDSCAPE APPRAISERS.

TREES ≤ 6 IN. WERE NOT ASSESSED BY WSSI.

CITY OF ROCKVILLE FOREST CONSERVATION WORKSHEET February 2010

NET TRACT AREA:

A. Total tract area …							2.09
B. Deductions (land dedication not in construction on this plan, other deductions - specify)							0.00
C. Net Tract Area ……=							2.09
LAND USE CATEGORY:							
ZONING: Place a "1" under the column corresponding to the correct zone of the site	R-400, R-200 20%A, 30%C	R-90, R-75, R-60, R-150 15%A, 25%C	RMD10, RMD15, RMD25 15% A&C	I-L, I-H, RPR, RPC, MXT, MXC, MXNC, MXB, MXE, MXCD, MXTD 15%A&C	Park 15%A, 20%C		
Zone: (choose only one)	0	0	0	1	0		
D. Afforestation Threshold …					15%	x F =	0.31
E. Conservation Threshold …					15%	x F =	0.31
EXISTING FOREST COVER:							
F. Existing forest cover (within net tract) ……=							0.00
G. Area of forest above conservation threshold ……=							0.00
BREAK EVEN POINT:							
H. Breakeven Point (amount of forest retained so that no mitigation is required)….=							0.00
I. Clearing permitted without mitigation ……=							0.00

MARYLAND DEPARTMENT OF NATURAL RESOURCES

Wes Moore, Governor
Aruna Miller, Lt. Governor
Josh Kurtz, Secretary
David Goshorn, Deputy Secretary

June 28, 2023

Mr. Luis Yanez
Wetland Studies and Solutions, Inc.
1131 Benfield Boulevard
Suite L
Millersville, MD 21108

RE: Environmental Review for 12501 Ardennes Avenue, Rockville, Montgomery County, Maryland.

Dear Mr. Yanez:

The Wildlife and Heritage Service has no official records for State or Federal listed, candidate, proposed, or rare plant or animal species within the project area shown on the map provided. As a result, we have no specific concerns regarding potential impacts to such species or recommendations for protection measures at this time. If the project changes in the future such that the limits of proposed disturbance or overall site boundaries are modified, please provide us with revised project maps and we will provide you with an updated evaluation.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at lori.byrne@maryland.gov or at (410) 260-8573.

Sincerely,

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER# 2023.0885.mo

Tawes State Office Building – 580 Taylor Avenue – Annapolis, Maryland 21401
410-260-8DNR or toll free in Maryland 877-620-8DNR – *dnr.maryland.gov* – TTY Users Call via the Maryland Relay

Community Planning & Development Services
Received
September 6, 2023

QUALIFIED PROFESSIONAL CERTIFICATION
THIS PLAN COMPLIES WITH THE CURRENT REQUIREMENTS OF CITY OF ROCKVILLE'S CODE AND THE ENVIRONMENTAL STANDARI
SIGNED: _____ DATE:07/25/2023
LUIS YANEZ
WETLAND STUDIES AND SOLUTIONS, INC.
1131 BENFIELD BOULEVARD, SUITE L
MILLERSVILLE, MD 21108
PH: (703) 679-5791 FAX: (410) 672-5993
E-MAIL: LYANEZ@WETLANDS.COM

Wetland Studies and Solutions, Inc. a DAVEY company
1131 Benfield Boulevard • Suite L
Millersville, Maryland 21108
Phone: 410-672-5990 • Fax: 410-672-5993
www.wetlands.com

Simplified Natural Resources Inventory / Forest Stand Delineation (NRI/FSD) Plan Table View

12501 Ardennes Ave
City of Rockville, MD

REVISIONS

No.	Date	Description	Rev. By	App. By

SCALE: As Noted
C.I.: ----
DATE: 7/28/2023

Horizontal Datum: MD NAD 83
Vertical Datum: NAD 88
Boundary and Topo Source: Engineer

Design	Draft	Approved
LY	LY	MK

Sheet #
2

WSSI Project Number:
MD2228.01

TWINBROOK - BUILDING TABULATIONS

UNIT TYPE				B4	B3	B2	B1	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	ROOF	TOTAL	MIX Units Per Type	MIX Average SF	MIX %	TARGET MIX Units Per Type	TARGET MIX Average SF	TARGET MIX %
S1	STUDIO	511	Net Sq. Ft.						1	1	1	1	1	1					6	**20**	577.80	11.0%			
S1m1	STUDIO	490	Net Sq. Ft.												1	1	1		3						
S1m2	STUDIO	474	Net Sq. Ft.					2											2						
S2	STUDIO	682	Net Sq. Ft.						1	1	1	1	1	1					6						
S2m1	STUDIO	660	Net Sq. Ft.												1	1	1		3						
A1	1BR, 1BA	582	Net Sq. Ft.					0	2	2	2	2	2	2					12	**18**	572.33	9.9%			
A1m1	1BR, 1BA	553	Net Sq. Ft.												2	2	2		6						
A2	1BR, 1BA	618	Net Sq. Ft.					1	1	1	1	1	1	1					7	**68**	753.54	37.6%			
A2m1	1BR, 1BA	590	Net Sq. Ft.												1	1	1		3						
A3	1BR, 1BA	686	Net Sq. Ft.					1	1	1	1	1	1	1					7						
A3m1	1BR, 1BA	653	Net Sq. Ft.												1	1	1		3						
A4	1BR, 1BA	705	Net Sq. Ft.						1	1	1	1	1	1					6						
A4m1	1BR, 1BA	674	Net Sq. Ft.																0						
A4m2	1BR, 1BA	651	Net Sq. Ft.					1							1	1	1		4						
A5	1BR, 1BA	793	Net Sq. Ft.					1	1	1	1	1	1	1					7						
A5m1	1BR, 1BA	750	Net Sq. Ft.												1	1	1		3						
A6	JR/1BR, 1BA	828	Net Sq. Ft.						1	1	1	1	1	1					6						
A6m1	JR/1BR, 1BA	806	Net Sq. Ft.												1	1	1		3						
A6m2	JR/1BR, 1BA	859	Net Sq. Ft.						1	1	1	1	1	1					6						
A6m3	JR/1BR, 1BA	837	Net Sq. Ft.												1	1	1		3						
A7	1BR, 1BA	883	Net Sq. Ft.					1	1	1	1	1	1	1					7						
A7m1	1BR, 1BA	839	Net Sq. Ft.												1	1	1		3						
C1	2BR, 2BA	937	Net Sq. Ft.						1	1	1	1	1	1					6	**50**	1,057.64	27.6%			
C1m1	2BR, 2BA	858	Net Sq. Ft.												1	1	1		3						
C2	2BR, 2BA	932	Net Sq. Ft.						1	1	1	1	1	1					6						
C2m1	2BR, 2BA	888	Net Sq. Ft.												1	1	1		3						
C3	2BR, 2BA	1,047	Net Sq. Ft.						1	1	1	1	1	1					6						
C3m1	2BR, 2BA	996	Net Sq. Ft.												1	1	1		3						
C4	2BR, 2BA	1,221	Net Sq. Ft.					1	2	2	2	2	2	2					13						
C4m1	2BR, 2BA	1,128	Net Sq. Ft.												2	2	2		6						
C4m2	2BR, 2BA	1,051	Net Sq. Ft.					1											1						
C5	2BR, 1BA	1,156	Net Sq. Ft.												1	1	1		3						
D1	2BR, 1BA + DEN	1,270	Net Sq. Ft.					1	1	1	1	1	1	1					7	**16**	1,301.31	8.8%			
D2	2BR, 1BA + DEN	1,400	Net Sq. Ft.						1	1	1	1	1	1					6						
D3	2BR, 1BA + DEN	1,177	Net Sq. Ft.												1	1	1		3						
E1	3BR, 2BA	1,375	Net Sq. Ft.						1	1	1	1	1	1					6	**9**	1,339.00	5.0%			
E1m1	3BR, 2BA	1,267	Net Sq. Ft.												1	1	1		3						
Units Per Floor								**10**	**19**	**19**	**19**	**19**	**19**	**19**	**19**	**19**	**19**		**181**		877.64	100.0%			
Net Area Per Floor								8,121	17,132	17,132	17,132	17,132	17,132	17,132	15,980	15,980	15,980		**158,853**						
Circulation/Mech				**474**	**474**	**474**		2,193	3,405	3,405	3,405	3,405	3,405	3,405	3,145	3,145	3,145	**775**	**34,255**						
Lobby / Leasing / Amenity				913	913	2,414		9,138											**13,378**						
Gross Area Per Floor				**1,387**	**1,387**	**2,888**		19,452	20,537	20,537	20,537	20,537	20,537	20,537	19,125	19,125	19,125	775	**206,486**						
Average Net Area per unit																			**878**						
Average Gross Area per unit																			**1,141**						
Building Efficiency								41.7%	83.4%	83.4%	83.4%	83.4%	83.4%	83.4%	83.6%	83.6%	83.6%		**76.9%**						
Parking Garage Area (Gross)				**6,557**	**51,613**	**51,613**	**50,112**												**159,895**						
Gross Area per Space																			**430**						
Existing garage Parking Total				**20**	**137**	**136**	**94**												**387**						
Proposed garage parking total				**20**	**136**	**135**	**81**												**372**						
Surface parking total								51											**51**						
Parking Ratio																			**2.34**						

Are parking requirements still being met?

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
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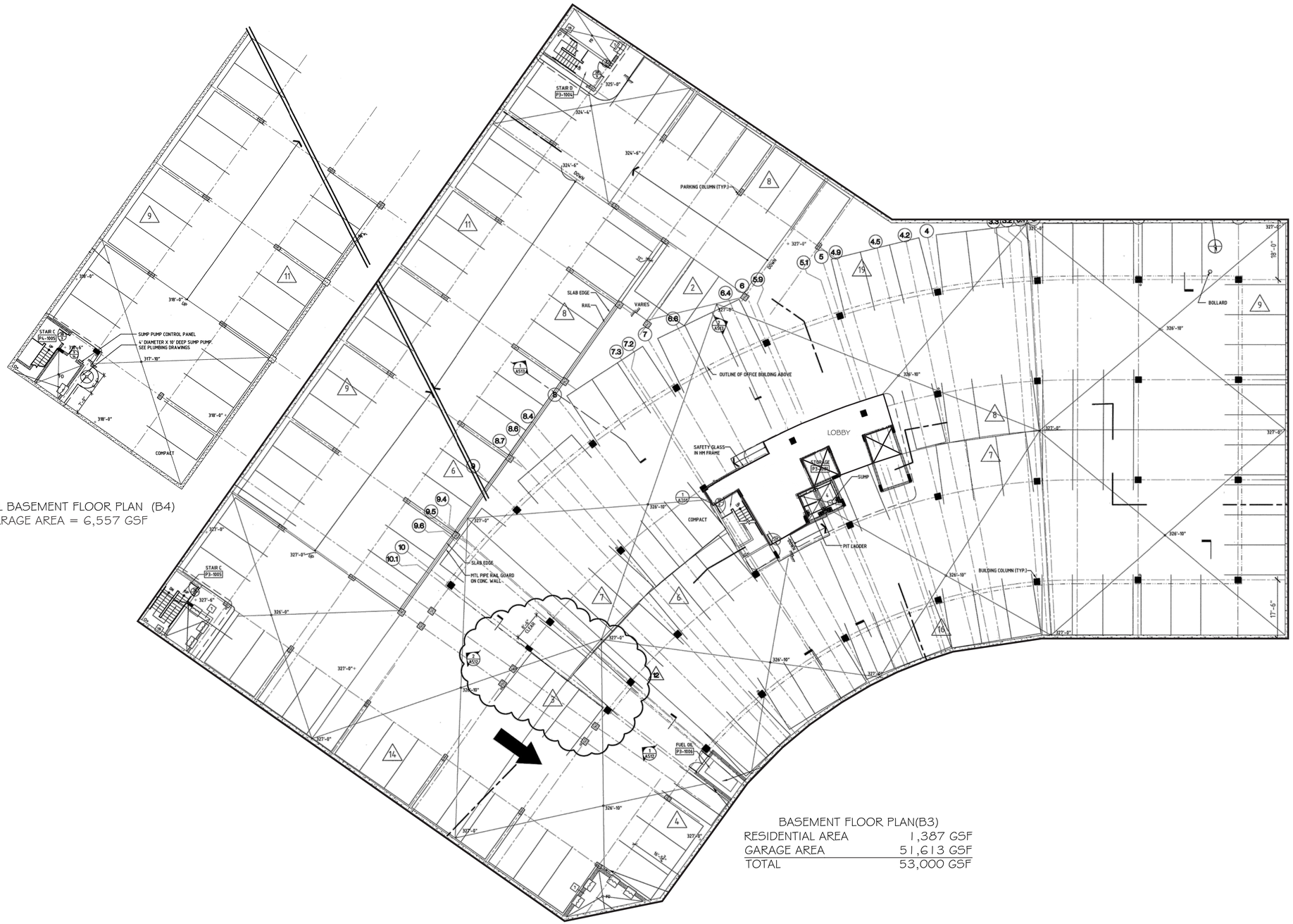
BUILDING TABULATIONS

SCHEMATIC DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

A.01



PARTIAL BASEMENT FLOOR PLAN (B4)
GARAGE AREA = 6,557 GSF

BASEMENT FLOOR PLAN(B3)

RESIDENTIAL AREA	1,387 GSF
GARAGE AREA	51,613 GSF
TOTAL	53,000 GSF

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BASEMENT FLOOR PLAN (B3)

SCHEMATIC DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

A.02

0' 8' 16' 32'
SCALE: 1/16"= 1'-0" (@ 22"x34")

BASEMENT FLOOR PLAN (B2)

RESIDENTIAL AREA	1,387 GSF
GARAGE AREA	51,613 GSF
TOTAL	53,000 GSF

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BASEMENT FLOOR PLAN (B2)

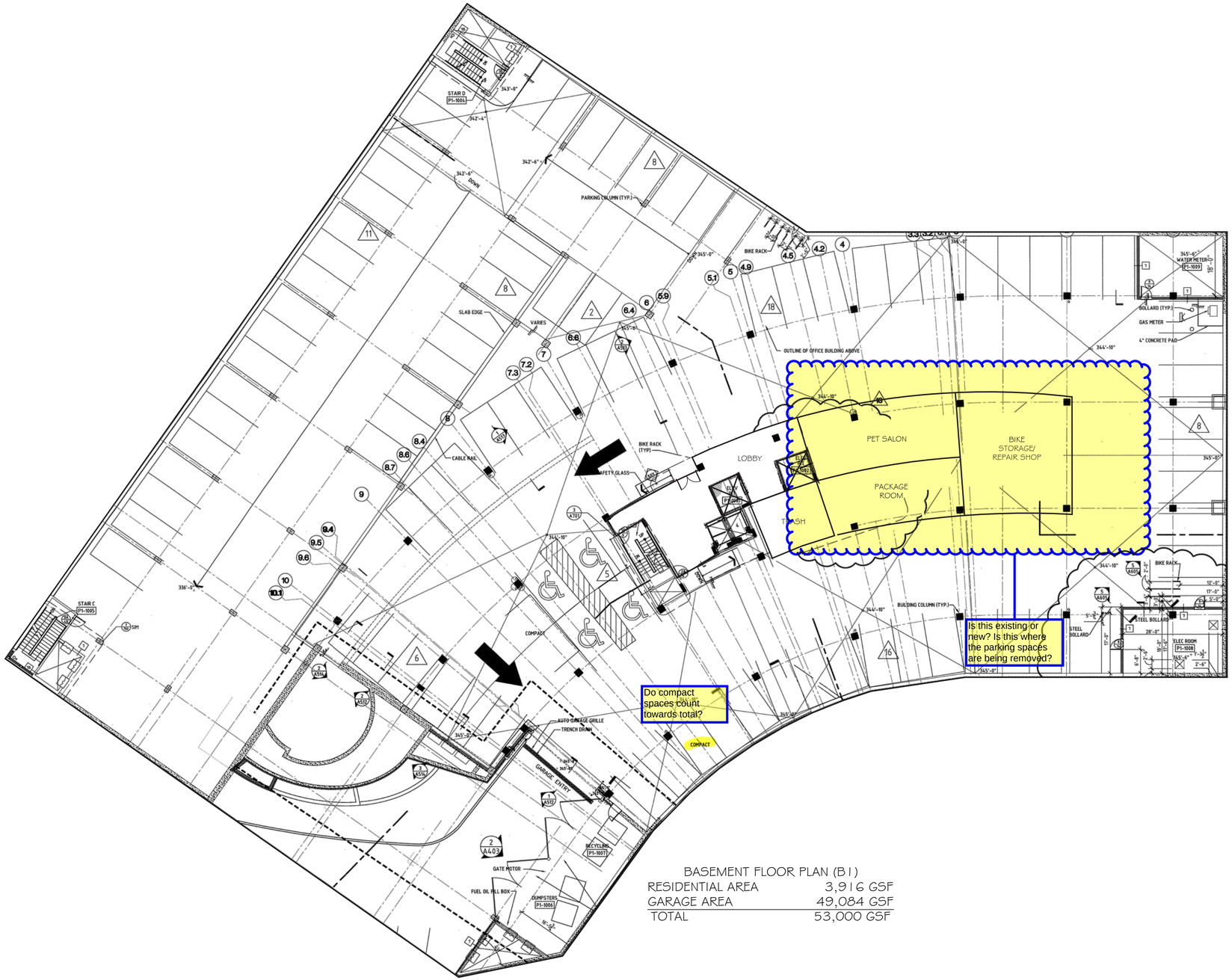
SCHEDULE DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

A.03

0' 8' 16' 32'
SCALE: 1/16"= 1'-0" (@ 22"x34")



BASEMENT FLOOR PLAN (B1)

RESIDENTIAL AREA	3,916 GSF
GARAGE AREA	49,084 GSF
TOTAL	53,000 GSF

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDESIGN.COM

BASEMENT FLOOR PLAN (B1)

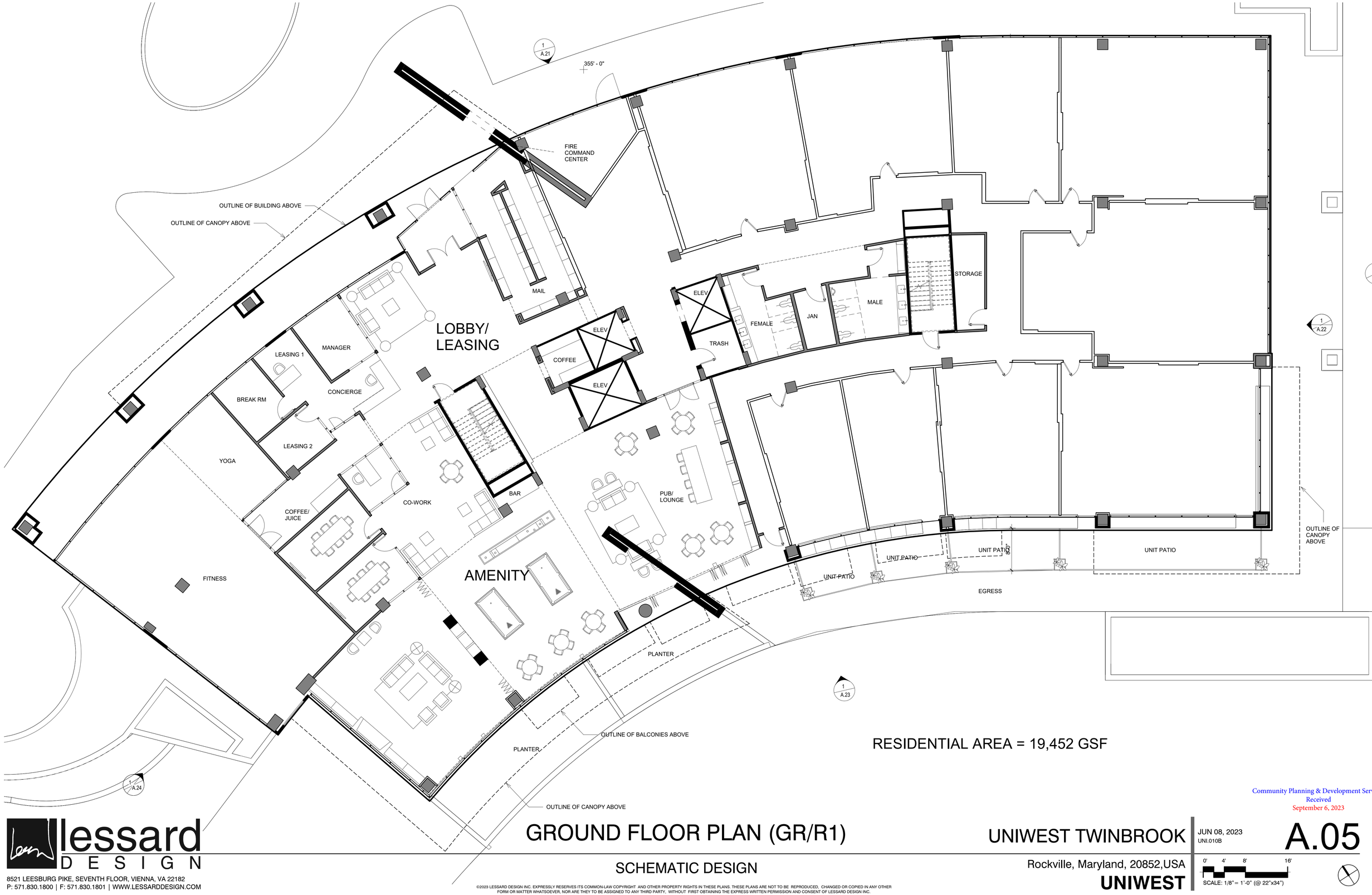
SCHEMATIC DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

A.04

0' 8' 16' 32'
SCALE: 1/16"= 1'-0" (@ 22"x34")



RESIDENTIAL AREA = 19,452 GSF

Community Planning & Development Services
Received
September 6, 2023

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDESIGN.COM

GROUND FLOOR PLAN (GR/R1)

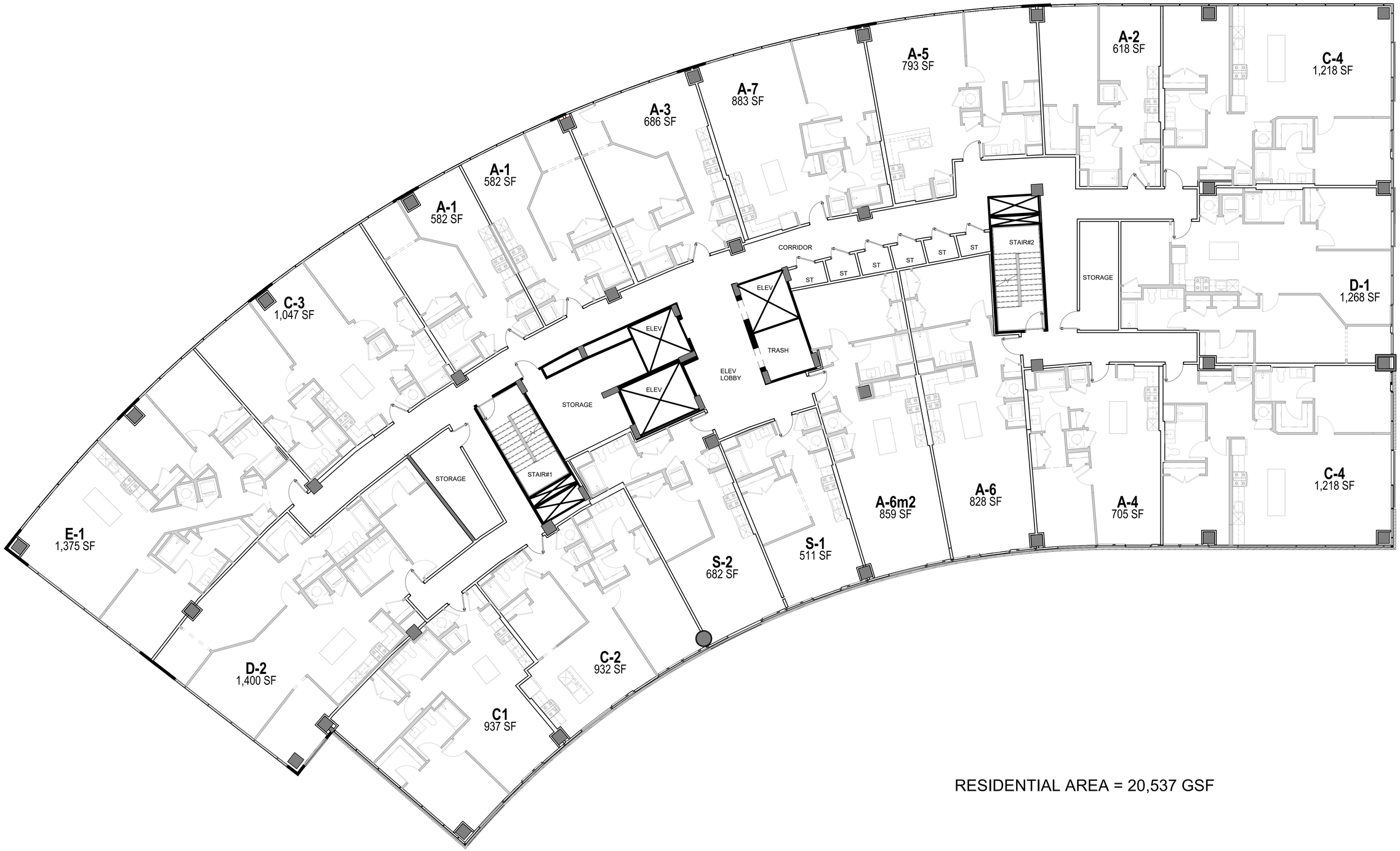
SCHEMATIC DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

A.05

0' 4' 8' 16'
SCALE: 1/8"= 1'-0" (@ 22"x34")



RESIDENTIAL AREA = 20,537 GSF

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDESIGN.COM

TYPICAL RESIDENTIAL FLOOR PLAN (R2-R7)

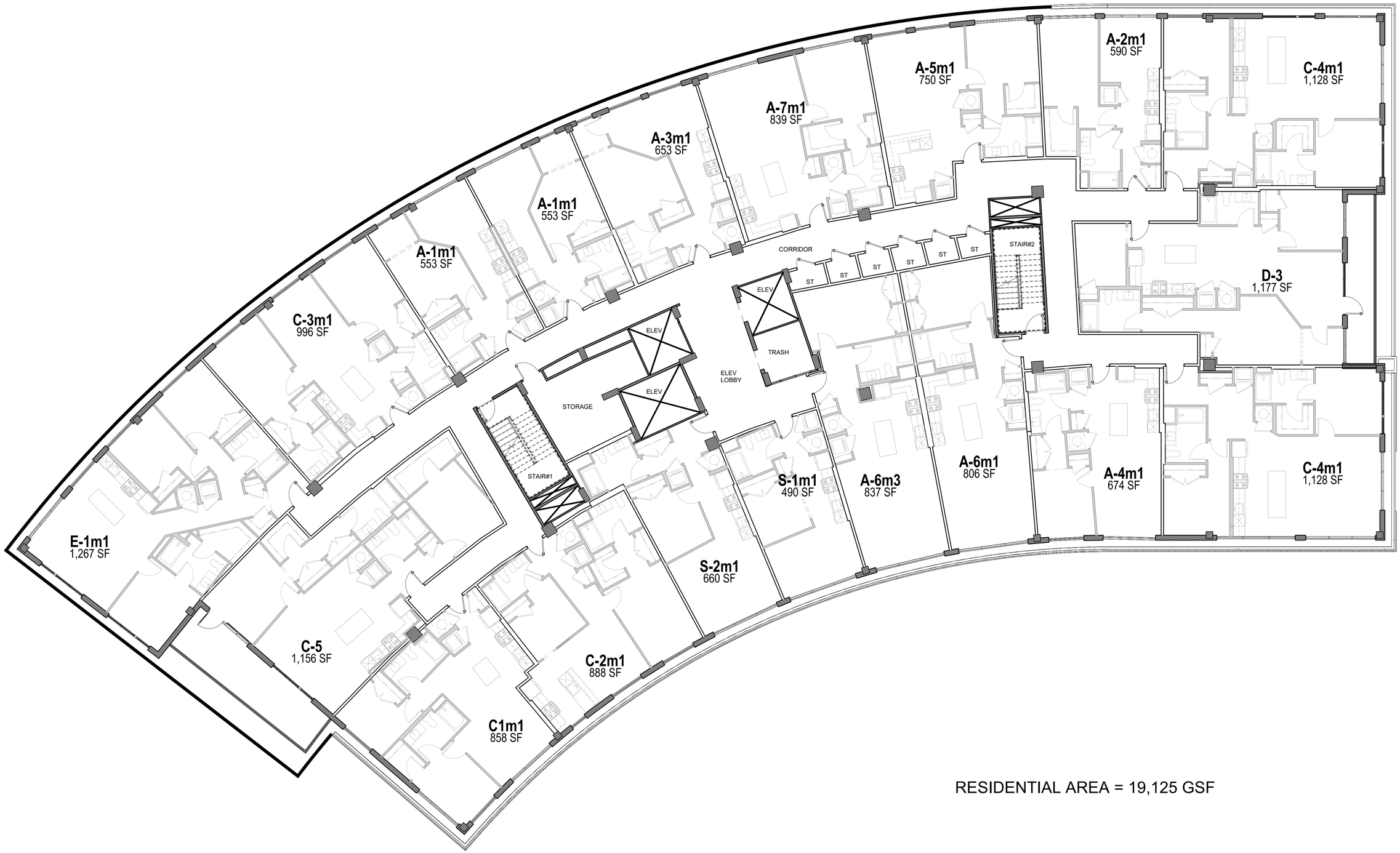
SCHEMATIC DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

A.06

0' 4' 8' 16'
SCALE: 1/8" = 1'-0" (@ 22"x34")



RESIDENTIAL AREA = 19,125 GSF

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDESIGN.COM

TYPICAL RESIDENTIAL FLOOR PLAN (R8-R10)

SCHEMATIC DESIGN

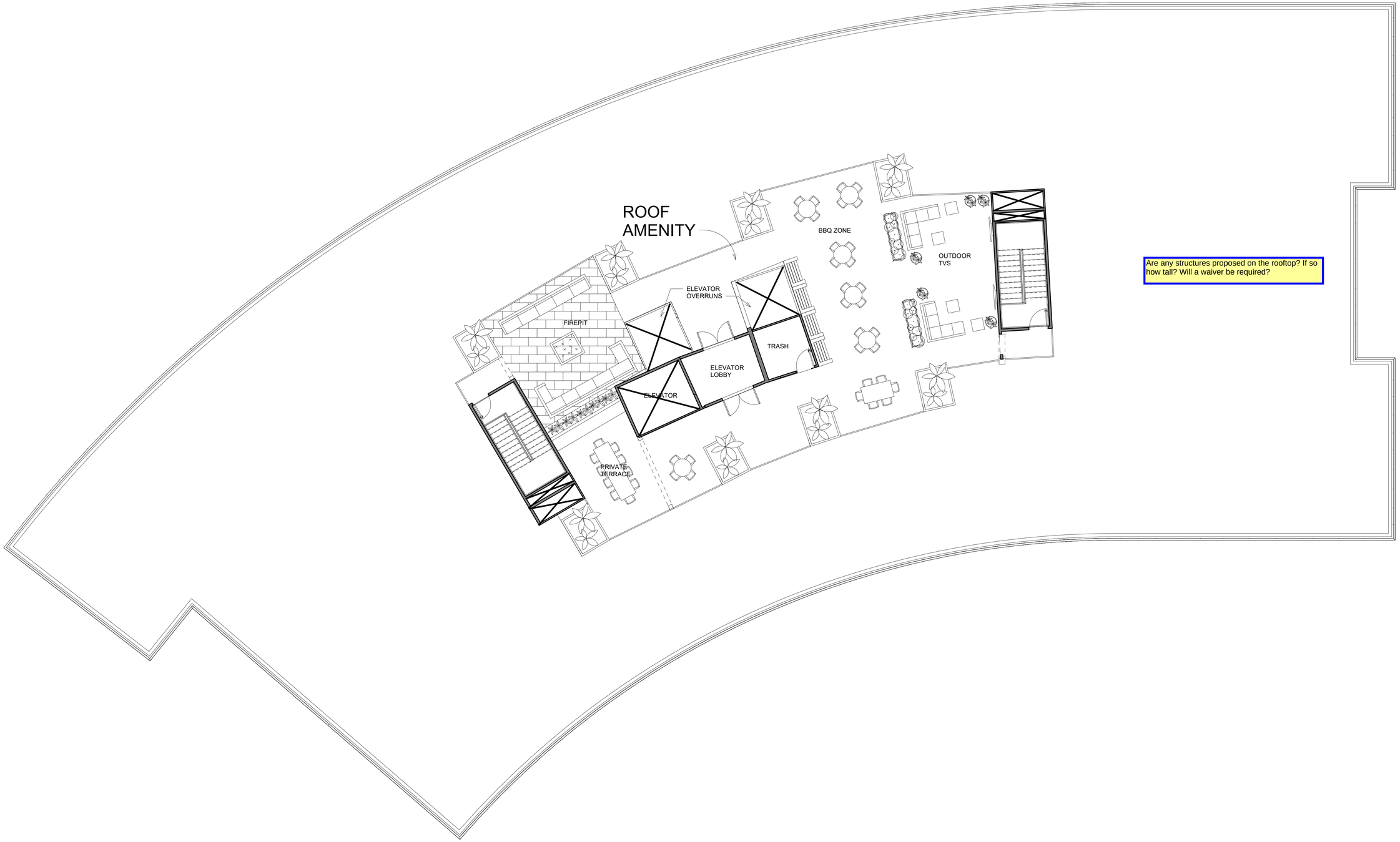
UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

A.07

0' 4' 8' 16'
SCALE: 1/8" = 1'-0" (@ 22"x34")

Community Planning & Development Services
Received
September 6, 2023



Are any structures proposed on the rooftop? If so how tall? Will a waiver be required?

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDESIGN.COM

ROOF PLAN

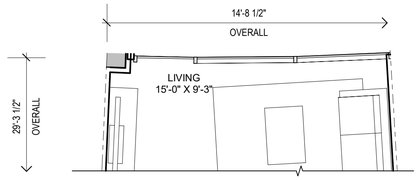
SCHEMATIC DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

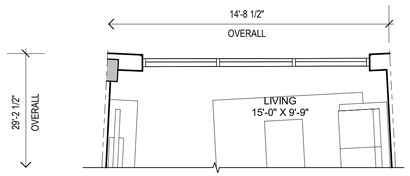
JUN 08, 2023
UNI.010B

A.08

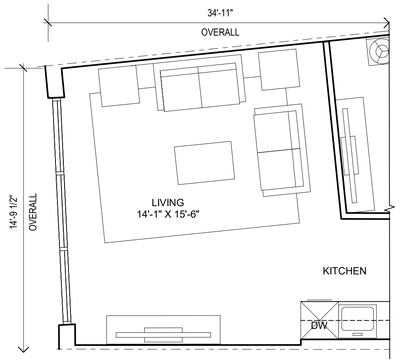
0' 4' 8' 16'
SCALE: 1/8" = 1'-0" (@ 22"x34")



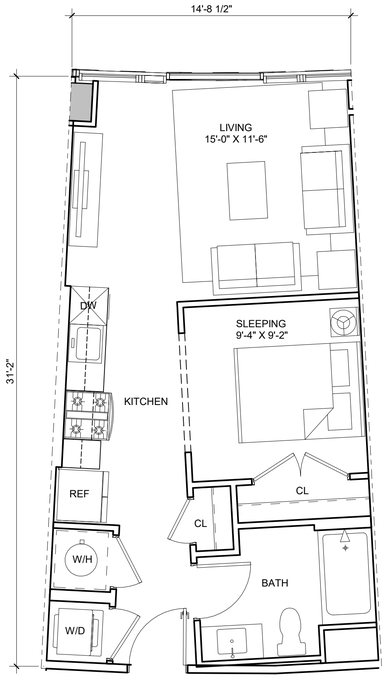
UNIT S1m2
474 NSF
2 UNITS
STUDIO



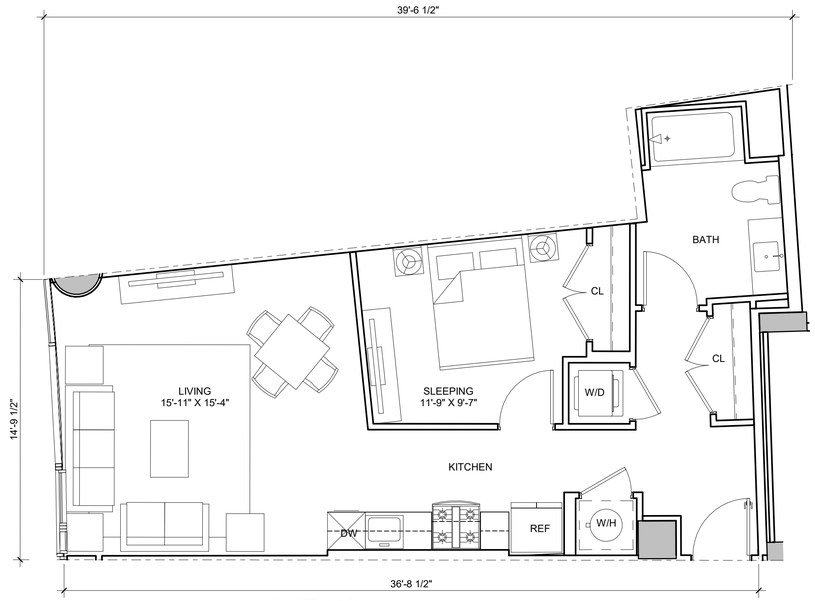
UNIT S1m1
490 NSF
3 UNITS
STUDIO



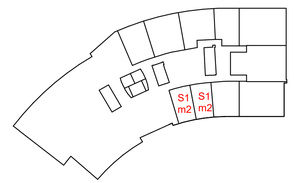
UNIT S2m1
661 NSF
3 UNITS
STUDIO



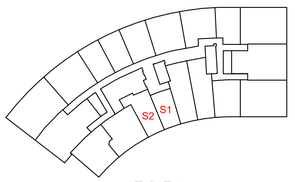
UNIT S1
511 NSF
6 UNITS
STUDIO



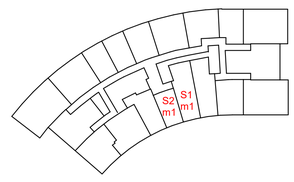
UNIT S2
682 NSF
6 UNITS
STUDIO



GR



R2-R7



R8-R10

KEY PLANS

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDESIGN.COM

UNIT PLANS

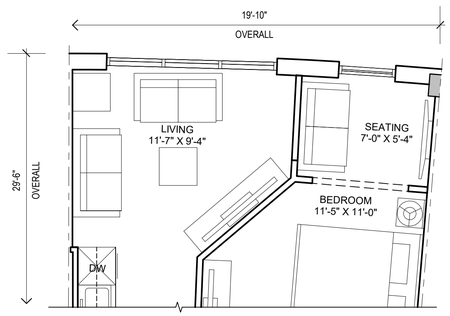
SCHEMATIC DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

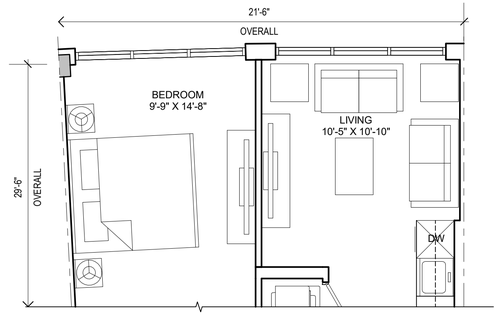
A.09

0' 2' 4' 8'
SCALE: 1/4" = 1'-0" (@ 22"x34")



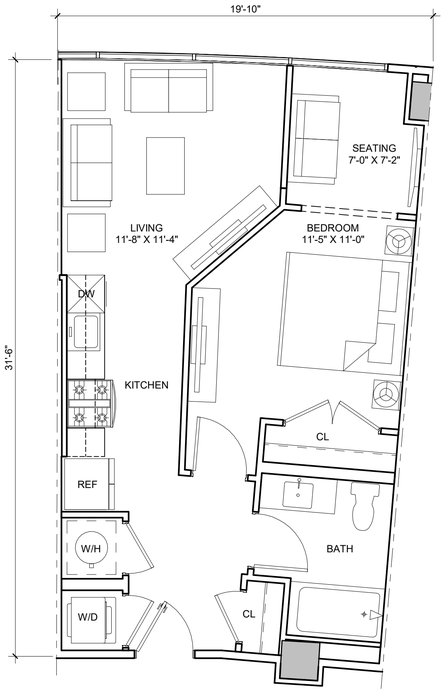
UNIT A1m1

553 NSF
6 UNITS
1BR / 1BA



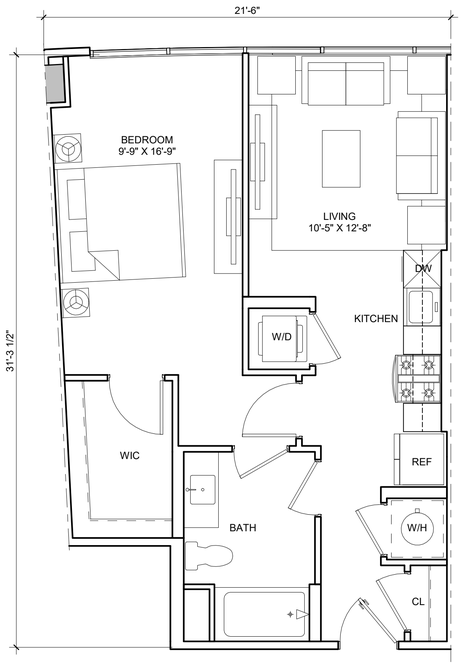
UNIT A2m1

590 NSF
3 UNITS
1BR / 1BA



UNIT A1

582 NSF
12 UNITS
1BR / 1BA



UNIT A2

618 NSF
7 UNITS
1BR / 1BA

KEY PLANS

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDESIGN.COM

UNIT PLANS

SCHEMATIC DESIGN

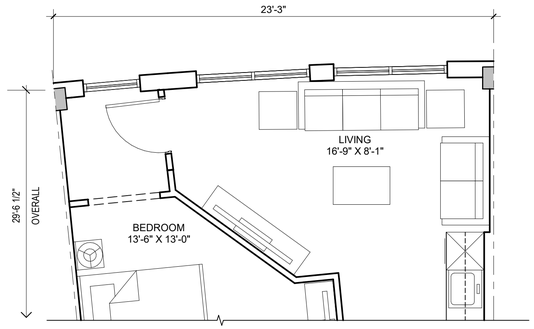
UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

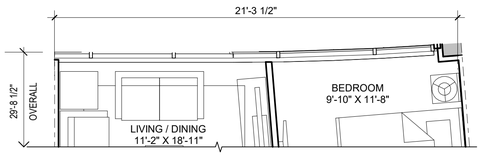
A.10

0' 2' 4' 8'
SCALE: 1/4"= 1'-0" (@ 22"x34")

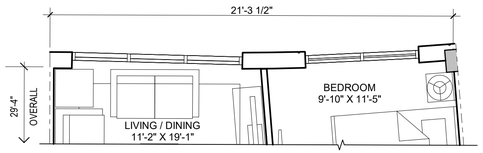
Community Planning & Development Services
Received
September 6, 2023



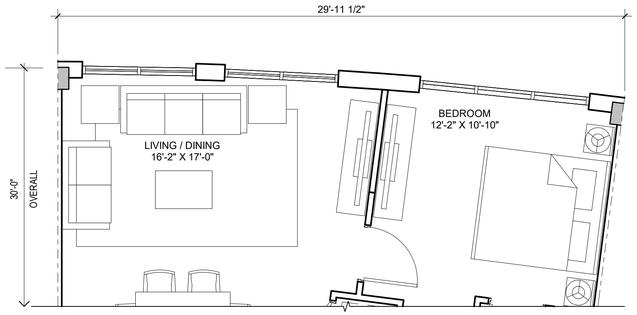
UNIT A3m1
653 NSF
3 UNITS
1BR / 1BA



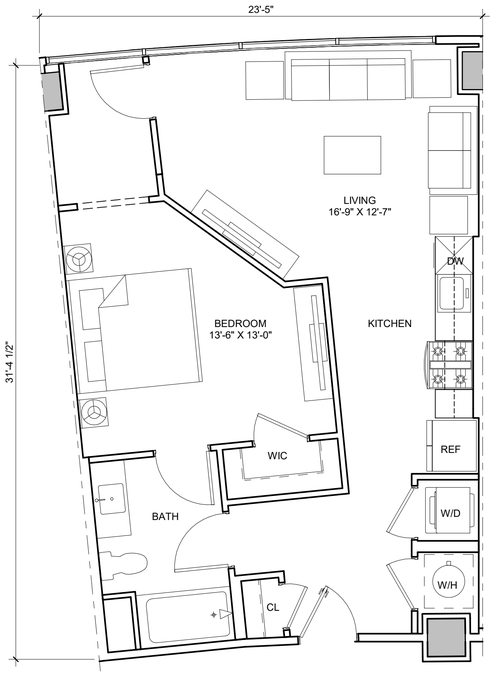
UNIT A4m2
651 NSF
1 UNIT
1BR / 1BA



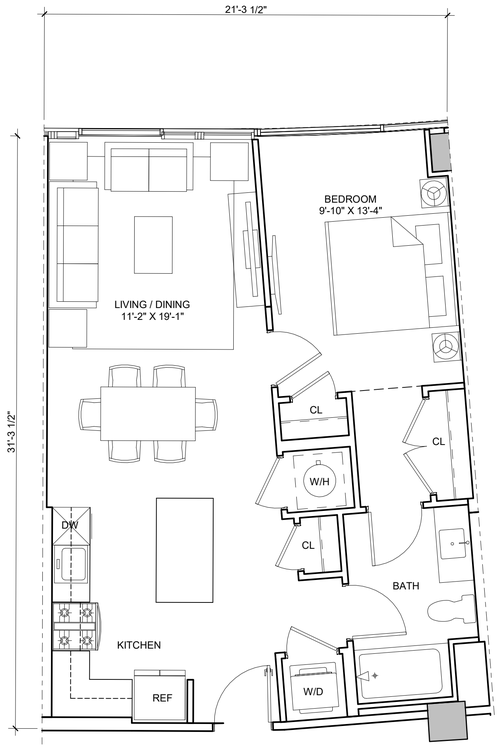
UNIT A4m1
674 NSF
4 UNITS
1BR / 1BA



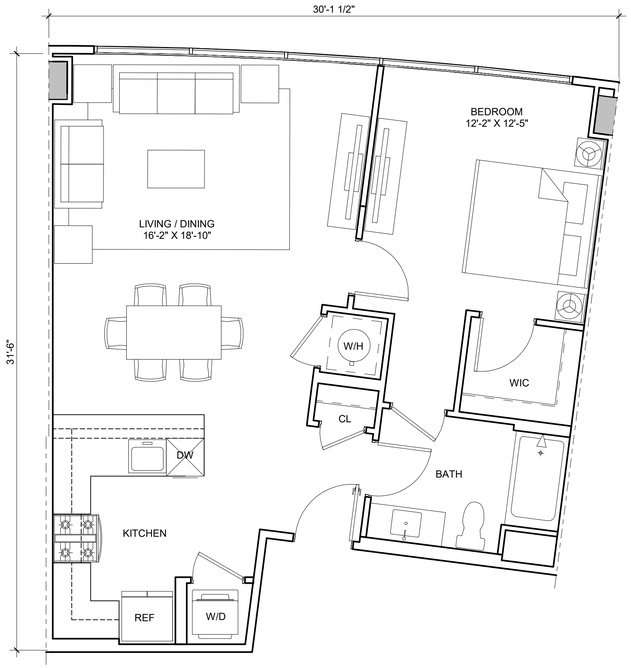
UNIT A5m1
750 NSF
3 UNITS
1BR / 1BA



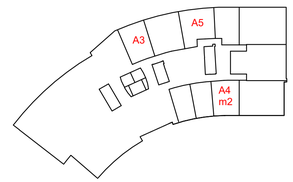
UNIT A3
686 NSF
7 UNITS
1BR /1BA



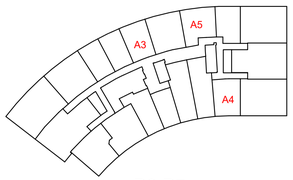
UNIT A4
705 NSF
6 UNITS
1BR / 1BA



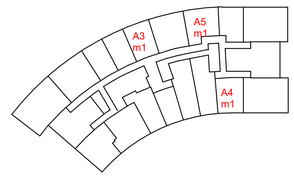
UNIT A5
793 NSF
7 UNITS
1BR / 1BA



GR



R2-R7



R8-R10

KEY PLANS

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDESIGN.COM

UNIT PLANS

SCHEMATIC DESIGN

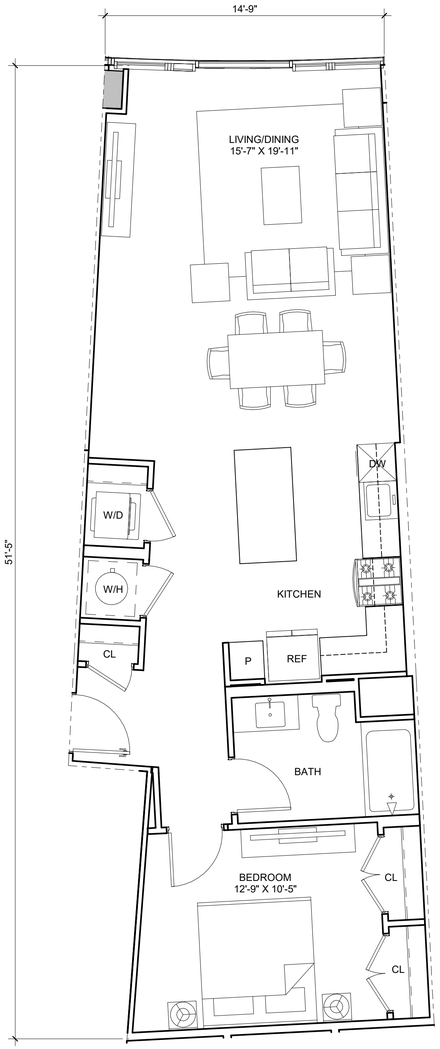
UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

A.11

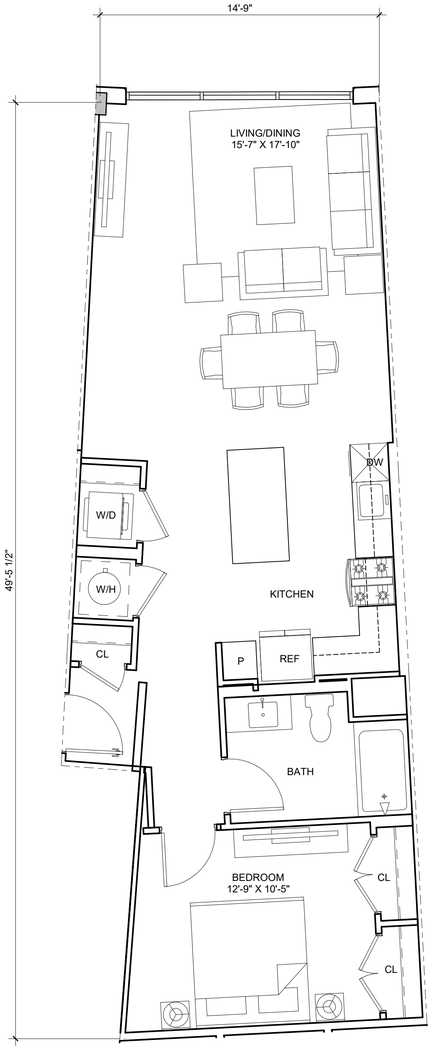
0' 2' 4' 8'
SCALE: 1/4"= 1'-0" (@ 22"x34")

Community Planning & Development Services
Received
September 6, 2023



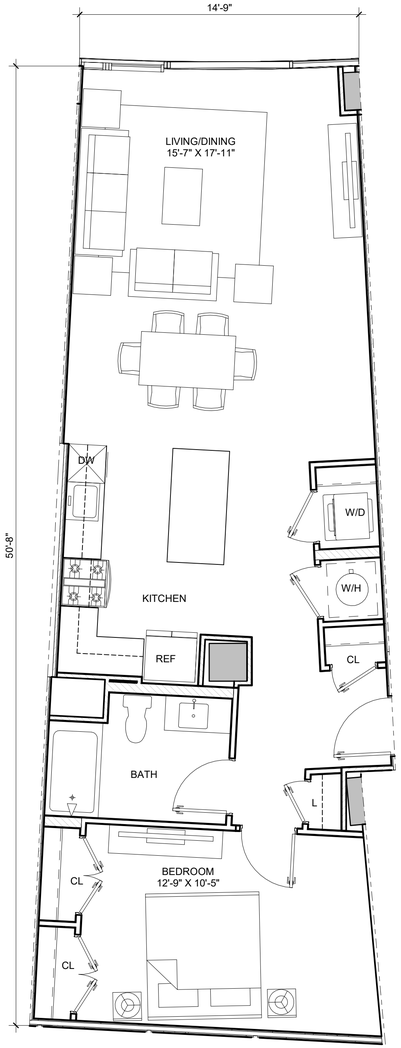
UNIT A6

828 NSF
6 UNITS
JR / 1BR / 1BA



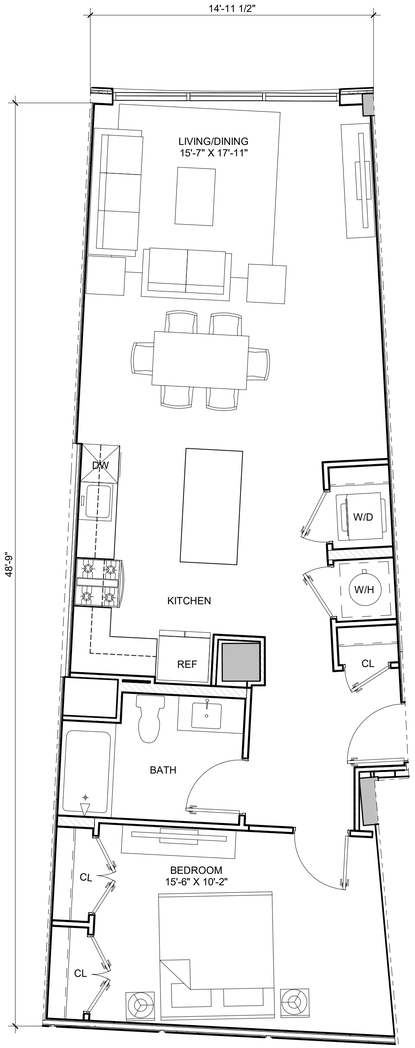
UNIT A6m1

806 NSF
3 UNITS
JR /1BR / 1BA



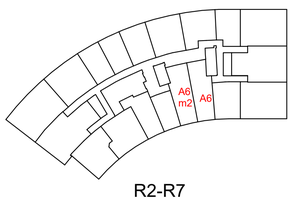
UNIT A6m2

859 NSF
6 UNITS
JR / 1BR / 1BA

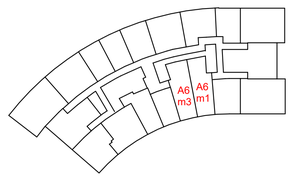


UNIT A6m3

837 NSF
3 UNITS
JR / 1BR / 1BA



R2-R7



R8-R10

KEY PLANS

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDESIGN.COM

UNIT PLANS

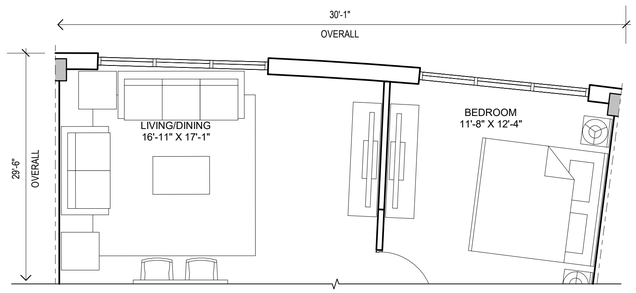
SCHEMATIC DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

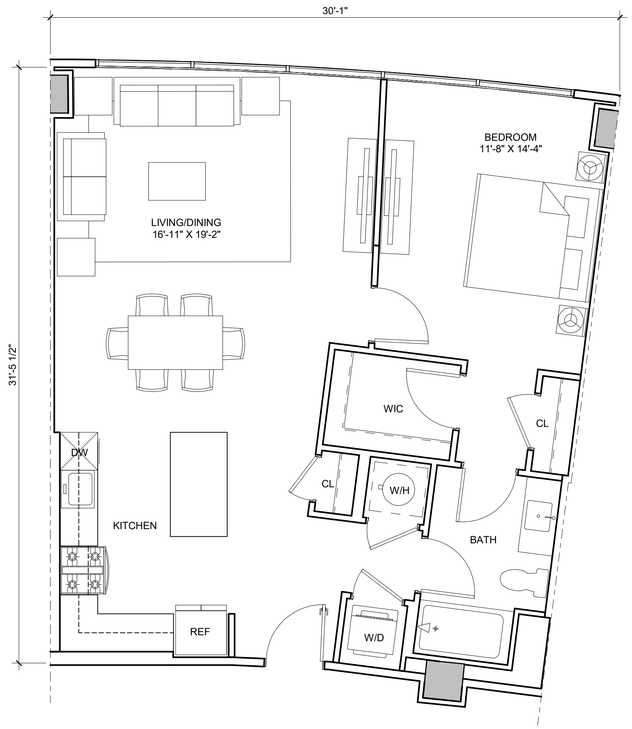
A.12

0' 2' 4' 8'
SCALE: 1/4" = 1'-0" (@ 22"x34")



UNIT A7m1

839 NSF
3 UNITS
1BR / 1BA



UNIT A7

883 NSF
7 UNITS
1BR / 1BA

KEY PLANS

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDESIGN.COM

UNIT PLANS

SCHEMATIC DESIGN

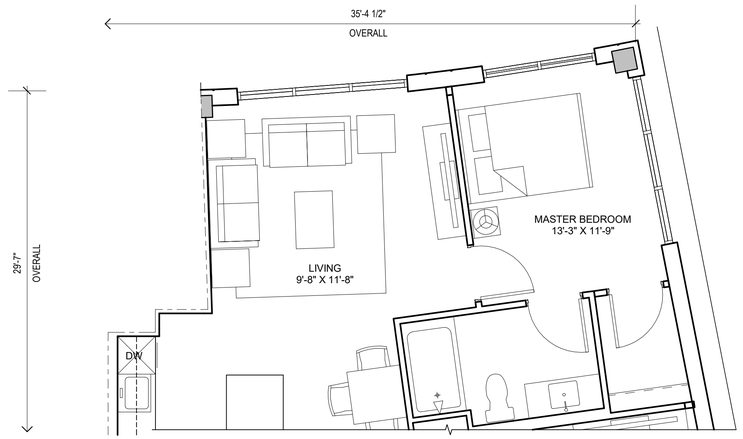
UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

A.13

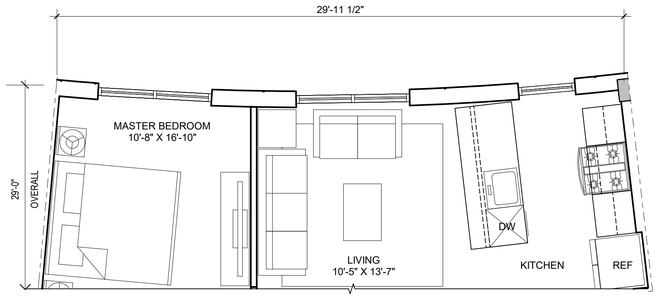
0' 2' 4' 8'
SCALE: 1/4" = 1'-0" (@ 22"x34")

Community Planning & Development Services
Received
September 6, 2023



UNIT C1m1

858 NSF
3 UNITS
2BR / 2BA

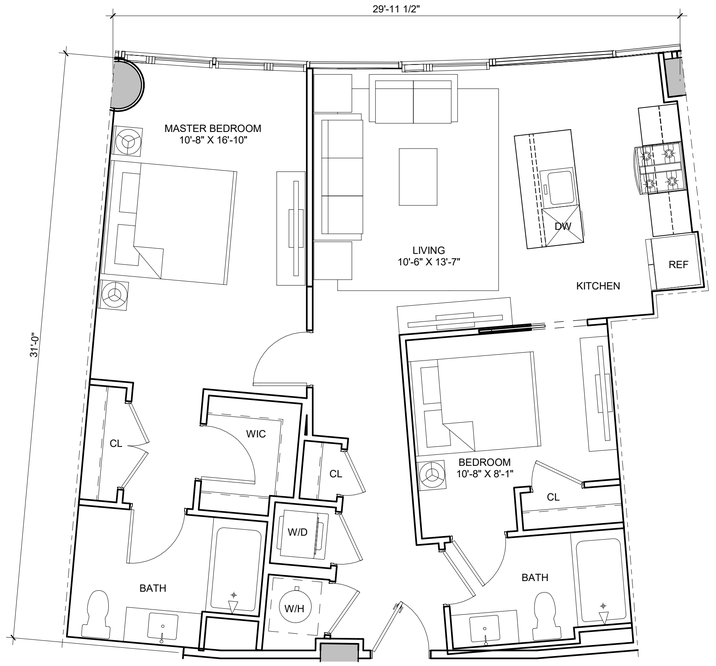


UNIT C2m1

888 NSF
3 UNITS
2BR / 2BA

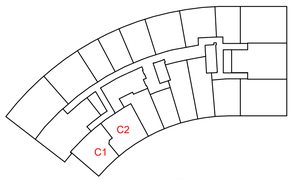
UNIT C1

937 NSF
6 UNITS
2BR / 2BA

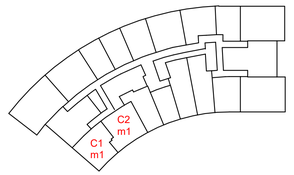


UNIT C2

932 NSF
6 UNITS
2BR / 2BA



R2-R7



R8-R10

KEY PLANS

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDESIGN.COM

UNIT PLANS

SCHEMATIC DESIGN

UNIWEST TWINBROOK

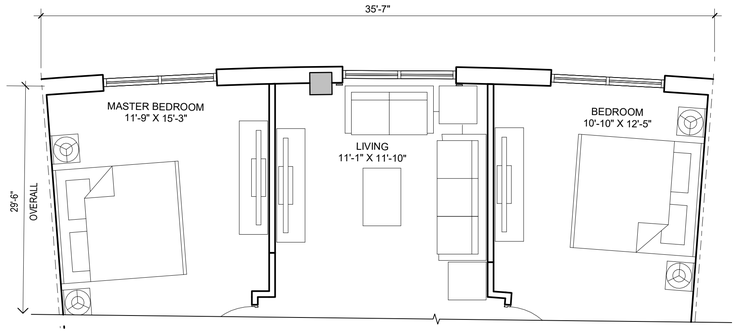
Rockville, Maryland, 20852,USA

UNIWEST

JUN 08, 2023
UNI.010B

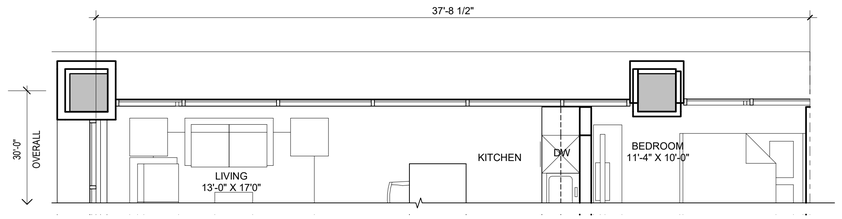
A.14

0' 2' 4' 8'
SCALE: 1/4" = 1'-0" (@ 22"x34")

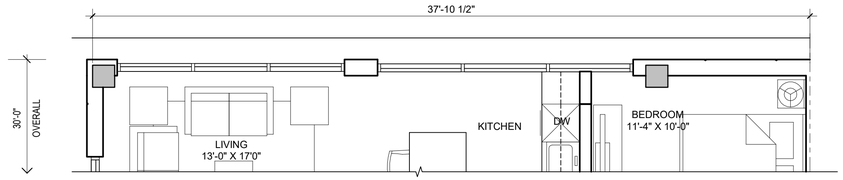


UNIT C3m1
996 NSF
3 UNITS
2BR / 2BA

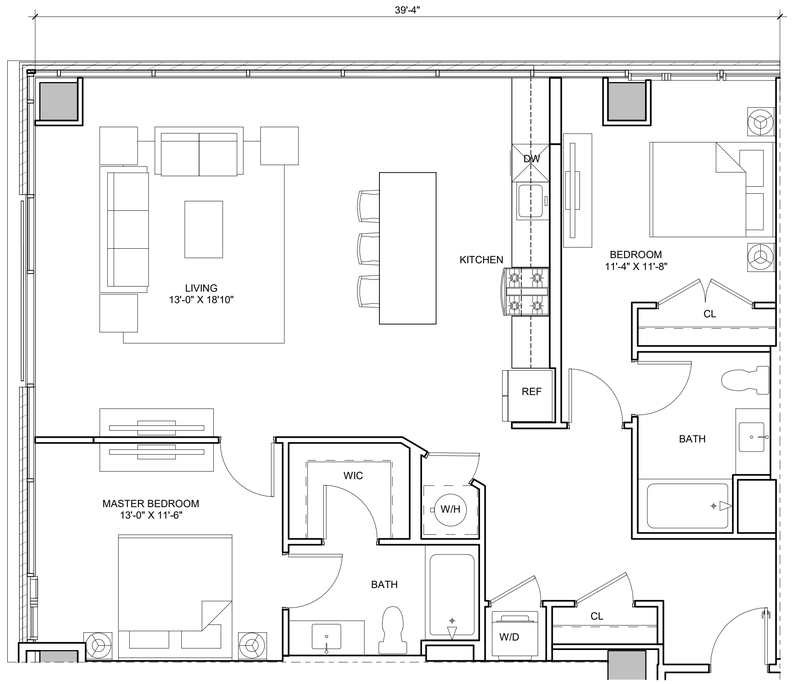
UNIT C3
1,047 NSF
6 UNITS
2BR / 2BA



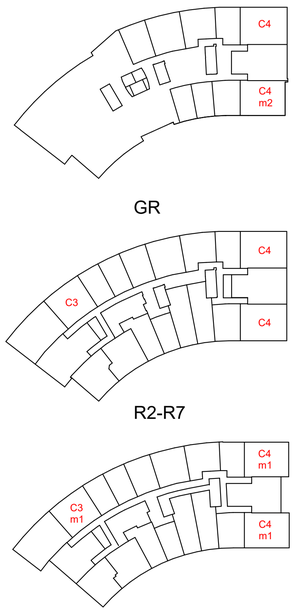
UNIT C4m2
1,051 NSF
1 UNIT
2BR / 2BA



UNIT C4m1
1,128 NSF
6 UNITS
2BR / 2BA



UNIT C4
1,221 NSF
13 UNIT
2BR / 2BA



KEY PLANS

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDESIGN.COM

UNIT PLANS

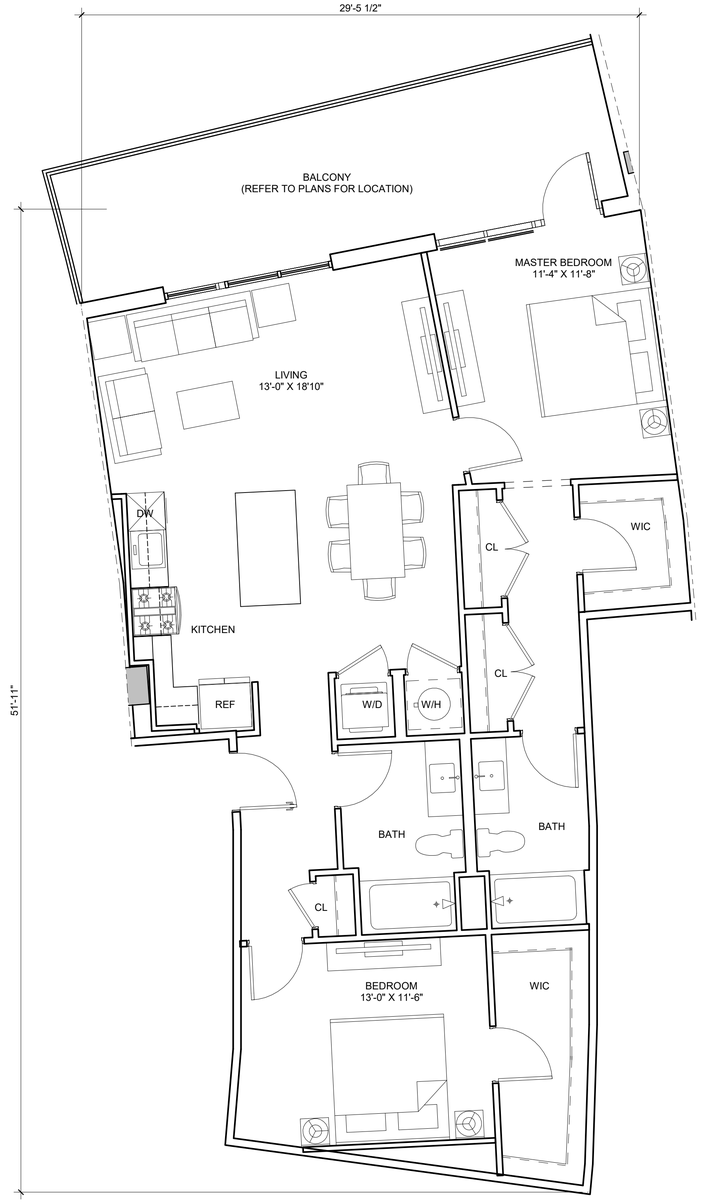
SCHEMATIC DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

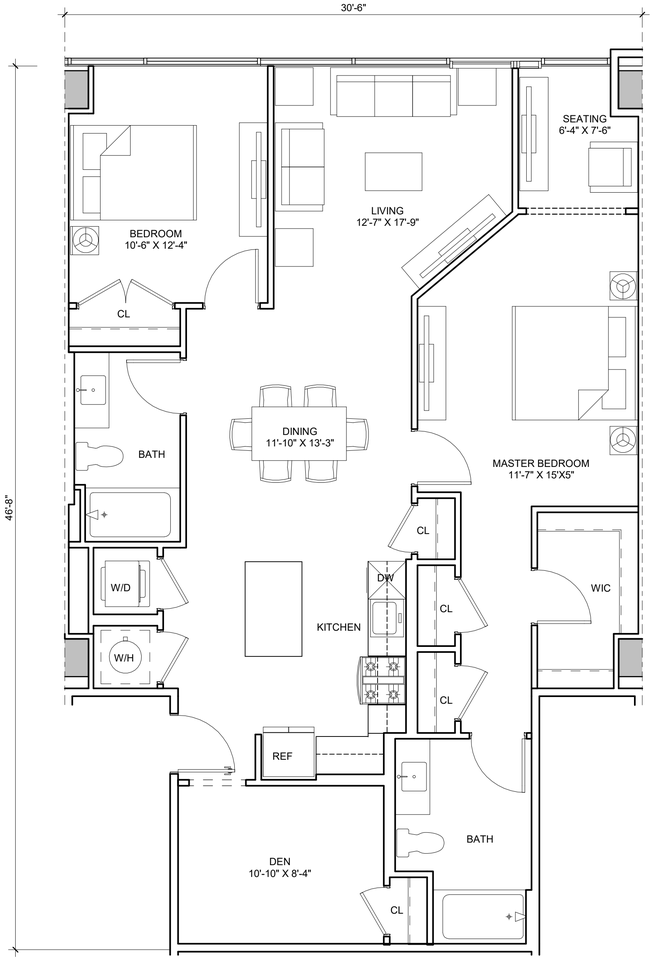
A.15

0' 2' 4' 8'
SCALE: 1/4"= 1'-0" (@ 22"x34")



UNIT C5

1,156 NSF
3 UNITS
2BR / 2BA



UNIT D1

1,270 NSF
7 UNITS
2BR / 1BA + DEN

KEY PLANS

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDESIGN.COM

UNIT PLANS

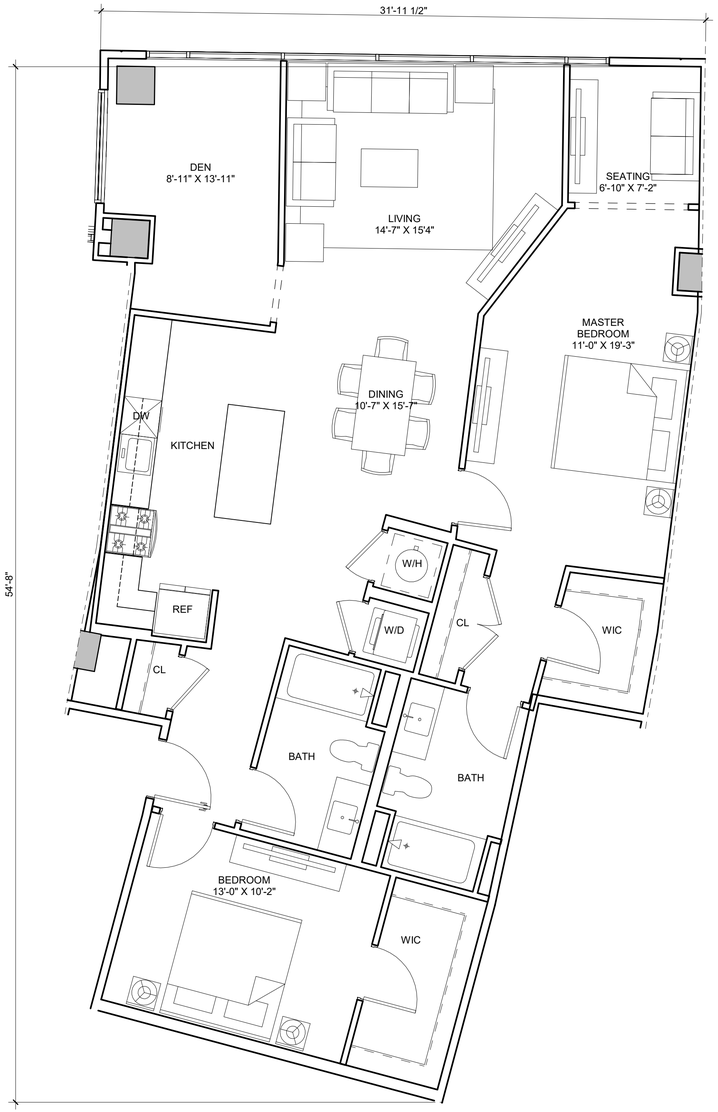
SCHEMATIC DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

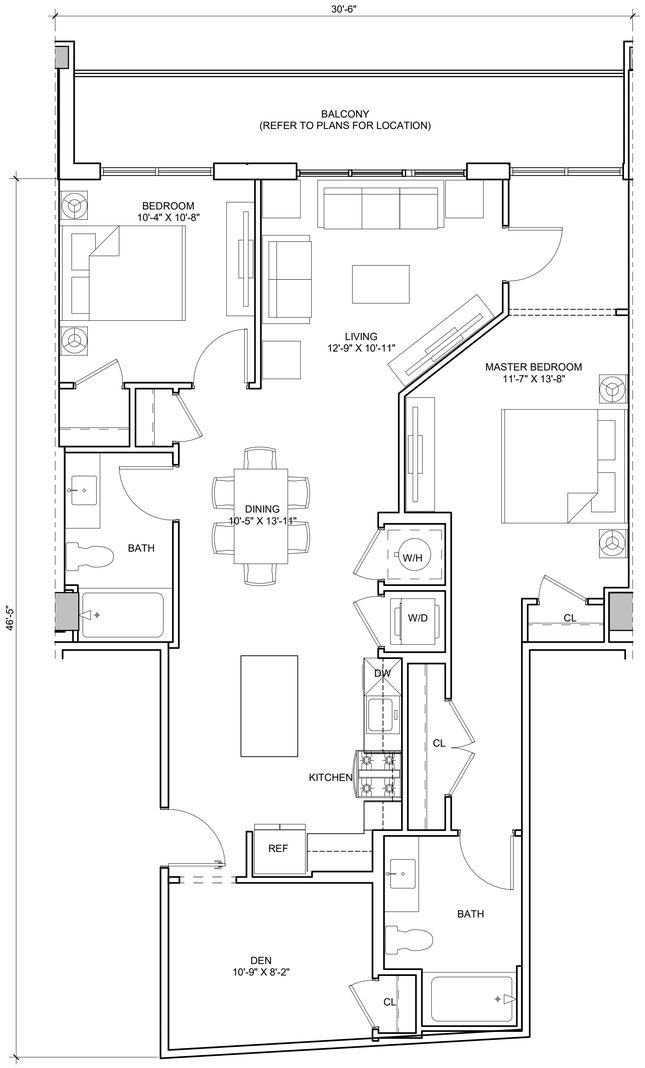
A.16

0' 2' 4' 8'
SCALE: 1/4" = 1'-0" (@ 22"x34")



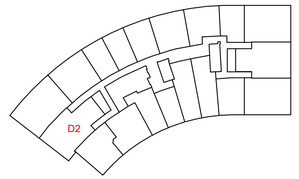
UNIT D2

1,400 NSF
6 UNITS
2BR / 2BA + DEN

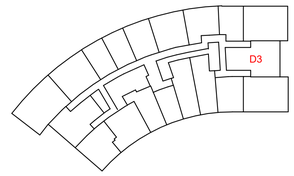


UNIT D3

1,177 NSF
3 UNITS
2BR / 1BA + DEN



R2-R7



R8-R10

KEY PLANS

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
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UNIT PLANS

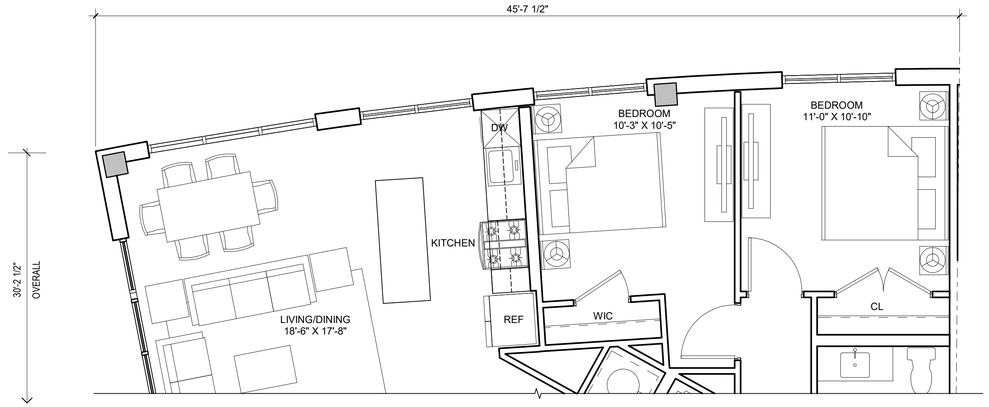
SCHEMATIC DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

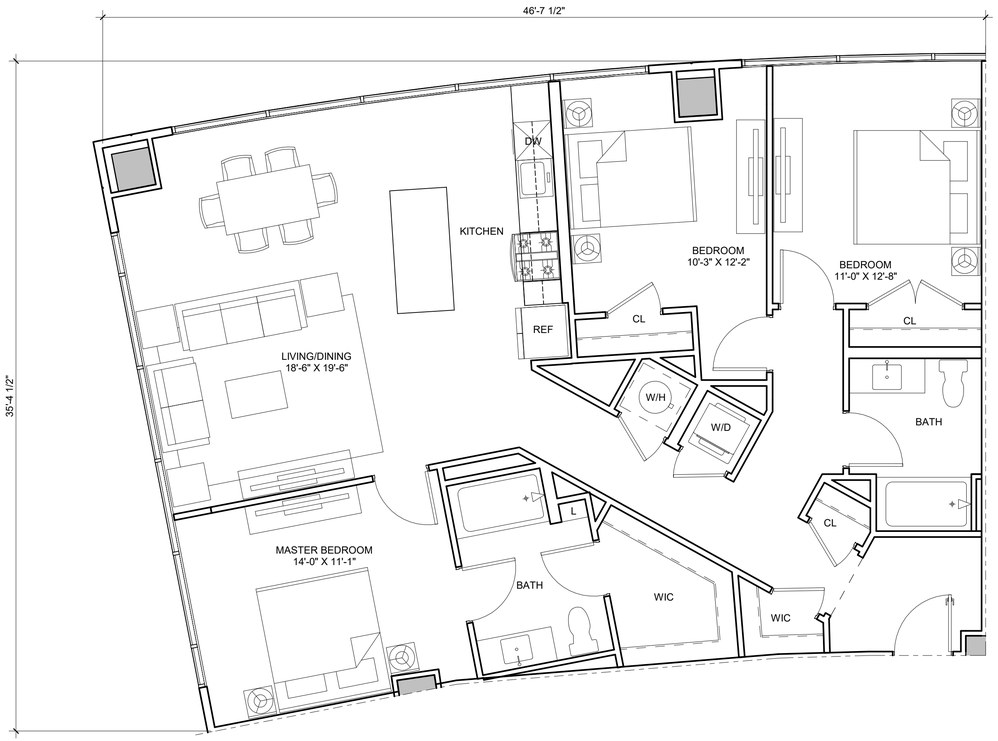
A.17

0' 2' 4' 8'
SCALE: 1/4"= 1'-0" (@ 22"x34")



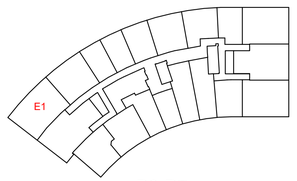
UNIT E1m1

1,267 NSF
3 UNITS
3BR / 2BA

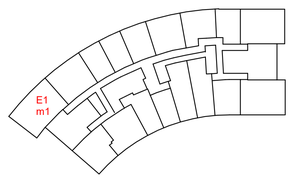


UNIT E1

1,375 NSF
6 UNITS
3BR / 2BA



R2-R7



R8-R10

KEY PLANS

lessard DESIGN
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UNIT PLANS

SCHEMATIC DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

A.18

0' 2' 4' 8'
SCALE: 1/4"= 1'-0" (@ 22"x34")

1 A.21 NEW NORTH ELEVATION
Scale: 3/32" = 1'-0"

lessard DESIGN
8521 LEESBURG PIKE, SEVENTH FLOOR, VIENNA, VA 22182
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NORTH ELEVATION

SCHEMATIC DESIGN

UNIWEST TWINBROOK
Rockville, Maryland, 20852,USA
UNIWEST

JUN 08, 2023
UNI.010B

A.21

PERSPECTIVE RENDERING

Community Planning & Development Services
Received
September 6, 2023

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Community Planning & Development Services
Received
September 6, 2023

PERSPECTIVE RENDERING

Community Planning & Development Services
Received
September 6, 2023